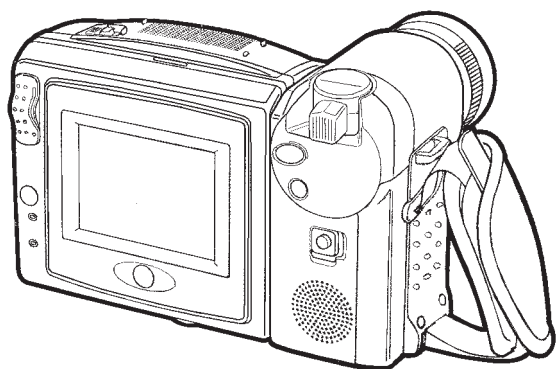


SHARP SERVICE MANUAL

S29C4VL-H870U

LIQUID CRYSTAL CAMCORDER Hi 8 NTSC



VL-H870U
VL-H875U
MODELS VL-H890U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

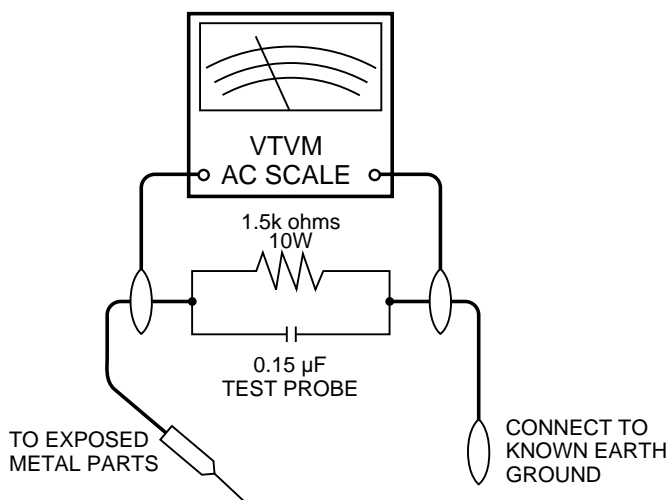
1. IMPORTANT SERVICE NOTES

BEFORE RETURNING THE VIDEO CAMERA RECORDER

Before returning the video camera recorder to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the video camera recorder.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
 - Plug the AC line cord directly into a 120 volt AC outlet (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in series with all exposed metal cabinet parts and a known ground, such as a water pipe or conduit.
 - Use a VTVM or VOM with 1000 ohm per volt, or higher sensitivity or measure the AC voltage drop across the resistor (See Diagram).
 - Move the resistor connection to all exposed metal parts having a return path to the chassis (antenna

connections, metal cabinet, screw heads, knobs and control shafts, etc.) and measure the AC voltage drop across the resistor. Reverse the AC plug (a non polarized adaptor plug must be used but only for the purpose of completing these checks) on the set and repeat the AC voltage measurements for each exposed metallic part. Any reading of 0.45V rms (this corresponds to 0.3mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the video camera recorder to the user.



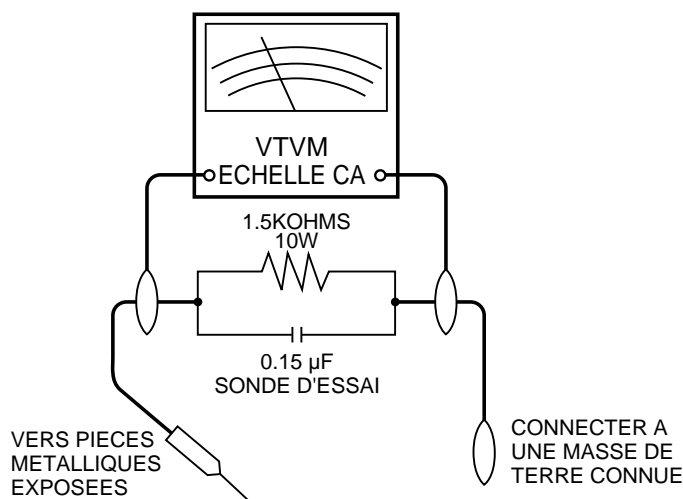
1. NOTES DE SERVICE IMPORTANTES

AVANT DE RENDRE LE MAGNETOSCOPE

Avant de rendre le magnétoscope à l'utilisateur, effectuer les vérifications de sécurité suivantes.

1. Vérifier toutes les gaines de fil pour être sûr que les fils ne sont pas pincés ou que le matériel n'est pas coincé entre le châssis et les autres pièces métalliques dans le magnétoscope.
2. Vérifier tous les dispositifs de protection tels que les boutons de commande non métalliques, les matériaux d'isolement, le dos du coffret, les couvercles de compartiment et ajustement ou les boucliers, les réseaux de résistance / condensateur d'isolement, les isolateurs mécaniques, etc.
3. Pour être sûr qu'il n'y a aucun risque de choc électrique, vérifier le courant de fuite de la manière suivante.
 - Brancher le cordon d'alimentation secteur directement dans une prise de courant de 120 volts. (Ne pas utiliser de transformateur d'isolement pour cet essai).
 - Utiliser deux fils à pinces et connecter une résistance de 10 watts 1,5 kohm en parallèle avec un condensateur de 0,15 μ F en série avec des pièces du coffret métallique exposées et une masse de terre connue telle qu'un tuyau ou un conduit d'eau.
 - Utiliser un VTVM ou VOM avec une sensibilité de 1000 ohms par volt ou plus ou mesurer la chute de tension CA entre la résistance (voir diagramme).
 - Déposer la connexion de la résistance à toutes les pièces métalliques exposées ayant un parcours de

retour au châssis (connexions d'antenne, coffret métallique, têtes de vis, boutons et arbres de commande, etc.) et mesurer la chute de tension CA entre la résistance. Inverser la fiche CA (une fiche intermédiaire non polarisée doit être utilisée à seule fin de faire ces vérifications.) sur l'appareil et répéter les mesures de tension CA pour chaque pièce métallique exposée. Toute lecture de 0,45 V rms (ceci correspond à 0,3 mA rms CA) ou plus est excessive et signale un danger de choc qui doit être corrigé avant de rendre le magnétoscope à son utilisateur.



WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO WET LOCATIONS.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.

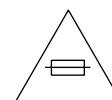


This symbol alerts the user that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION

This symbol mark means following.
For continued protection against fire hazard, replace only with same type fuse.
(CP901; 1.2A 72V, CP902; 1.2A 72V, CP903; 1.2A 72V)

Camcorder only



ATTENTION: POUR REDUIRE LES RESQUES D'INCENDIE OU DE CHOC ELECTRIQUE, NE PAS EXPOSER CET APPAREIL A LA PLUIE OU A L'HUMIDITE.



ATTENTION

RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR



ATTENTION: AFIN DE REDUIRE LES RISQUES DE CHOC ELECTRIQUE, NE PAS RETIRER LE COUVERCLE, AUCUN ORGANE INTERNE NE PEUT ETRE REPARÉ PAR L'UTILISATEUR, CONFIER L'APPAREIL A UN DEPANNEUR QUALIFIE.



Ce symbole signale à l'utilisateur la présence d'une tension non isolée à l'intérieur de l'appareil qui peut être la cause de secousses électriques dangereuses.

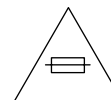


Ce symbole avertit l'utilisateur que des instructions importantes relatives à l'utilisation et à l'entretien se trouvent dans le manuel accompagnant l'appareil.

ATTENTION

Ce symbole signifie que l'on devra utiliser un fusible de même type (CP901; 1.2A 72V, CP902; 1.2A 72V, CP903; 1.2A 72V) pour assurer la sécurité.

Camcorder seulement





CAUTION
BEFORE BATTERY DESTROY

■ **NICKEL-CADMIUM BATTERY**

The following program is available in the United States. Please consult local environmental authorities concerning the availability of this or other programs in your area.

The RBRC™ Seal

SHARP participates in the RBRC™* Nickel-Cadmium Battery Recycling Program in the United States. The RBRC™ Seal on our battery pack contained in our product indicates that SHARP is voluntarily participating in an industry program to collect and recycle these batteries. The RBRC™ program provides you with a convenient alternative to placing spent Nickel-Cadmium battery packs into the trash or municipal waste stream, which is illegal in some areas. At the end of their useful life, the Nickel-Cadmium battery can be dropped off at the nearest collection center for recycling. For information on the nearest collection center, call 1-800-8-BATTERY or your local recycling center. If you are located outside the United States, contact your local authorities for information concerning proper disposal and/or recycling of this battery. SHARP's involvement in this program is part of our commitment to protecting our environment and conserving natural resources.

[Footnote] *RBRC™ is trademark of the Rechargeable Battery Recycling Corporation.

■ **NICKEL-METAL HYDRIDE BATTERY**

■ **LITHIUM or LITHIUM-ION BATTERY**

■ **SEALED LEAD BATTERY**

Battery disposal

Contains the above (Rechargeable) Battery. must be recycled or disposed of properly.

Remove the Battery from the products and contact Federal or State Environmental Agencies for information on recycling and disposal options.

2. SPECIFICATIONS

Signal System: NTSC standard
 Recording System: 2 rotary heads, helical scanning system
 Cassette: 8 mm video tape, MP type or Hi8 MP, ME type
 Recording/Playback Time: 120 minutes (P6-120)
 Tape Speed: 14.345 mm/second
 Pickup Device: 1/4" (6.4mm, effective size: 4.5 mm) CCD image sensor (with approx. 410,000 pixels including optical black)
 Lens: 22 × power zoom lens (F1.6, f=4.0-88.0 mm) and full-range auto focus
 Lens Filter Diameter: 46 mm
 Monitor: 3" (7.5 cm) (VL-H870U/H875U)
 3.5" (8.8 cm) (VL-H890U)
 full-color LCD screen (TFT active matrix)
 Microphone: Electret stereo microphone
 Color Temperature Compensation: Auto white balance with white balance lock
 Minimum Illumination: 4 lux (15 lux measured by EIA standard) (with gain-up, F1.6)
 Video Output Level: 1.0 Vp-p 75-ohm unbalanced, S video terminal, Y signal 1.0Vp-p chroma signal 286mVp-p(Burst)75Ω
 Audio Output Level: -8 dBs, impedance less than 2.2 kohms
 Speaker Output: 200 mW
 External Microphone Input: 3.5 mm diameter mini-plug, -66 dBs, output impedance 6.8kohms, DC 4 V, for plug-in-power microphone use
 Power Requirement: DC 7.4V
 Power Consumption: 4.9W (VL-H870U/H875U)
 5.3W (VL-H890U)
 (during camera recording in full auto mode with zoom motor off, Extend Zoom, DIS and Snapshot functions off, and backlight in normal mode)
 Operating Temperature: 0°C to + 40°C (32°F to 104°F)
 Operating Humidity: 30% to 80%
 Storage Temperature: -20°C to +60°C (-4°F to 140°F)
 Dimensions (approx.): 7 3/32" (W) × 4 13/32" (H) × 4 7/32" (D)
 [180 mm (W) × 112 mm (H) × 107 mm (D)]
 Weight (approx.): 1.66 lbs 755g (VL-H870U/H875U)
 1.68 lbs 760g (VL-H890U)
 (without battery pack, lithium battery, video cassette, and lens cap)

AC Adapter UADP-0303TAZZ (VL-H870U/H870UC/H875U/H890U/H890UC)

AC Adapter UADP-0304TAZZ (VL-H870UA/H870UW/H890UA/H890UW)

Power Requirement: AC 110-240 V, 50/60 Hz
 DC Output: 9.0 V
 Power Consumption: 15 W
 Dimensions (approx.): 2 11/16" (W) × 1 15/32" (H) × 5 13/32" (D)
 [68 mm (W) × 37 mm (H) × 137 mm (D)]
 Weight (approx.): 0.73 lbs (330 g)

Battery Pack BT-L241(VL-H870U/H875U)

DC Output: 7.2V
 Dimensions (approx.): 2 1/8" (W) × 3/4" (H) × 2 7/32" (D)
 [54 mm (W) × 19 mm (H) × 56 mm (D)]
 Weight (approx.): 0.30 lbs (136 g)

Battery Pack BT-L241 (VL-H890U)

DC Output: 7.4V
 Dimensions (approx.): 1 9/16" (W) × 1 11/16" (H) × 2 1/8" (D)
 [40 mm (W) × 43 mm (H) × 54 mm (D)]
 Weight (approx.): 0.21 lbs (97 g)

Specifications are subject to change without notice.

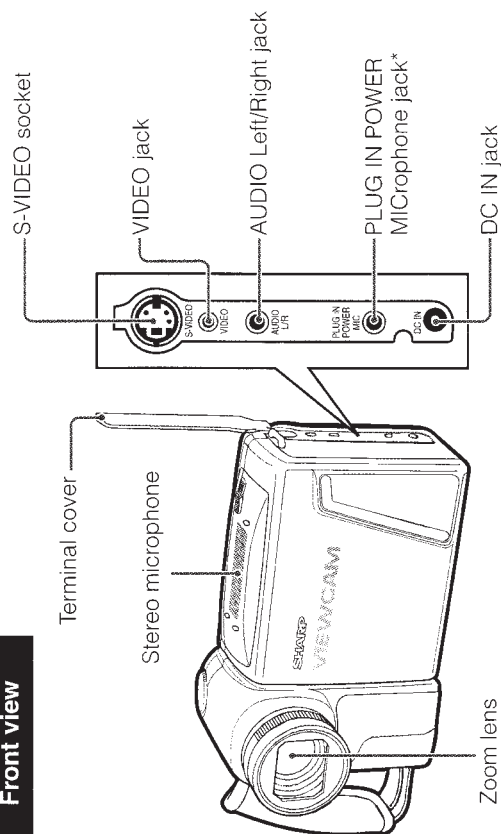
SERVICE INFORMATION (For the U.S.)

For the location of the nearest Sharp Authorized Service, or to obtain product literature, accessories, supplies or customer assistance, please call 1-800-BE SHARP (1-800-237-4277) or visit SHARP's website (<http://www.sharp-usa.com>)

3. PART NAMES AND FUNCTION

For details on the use of each control.

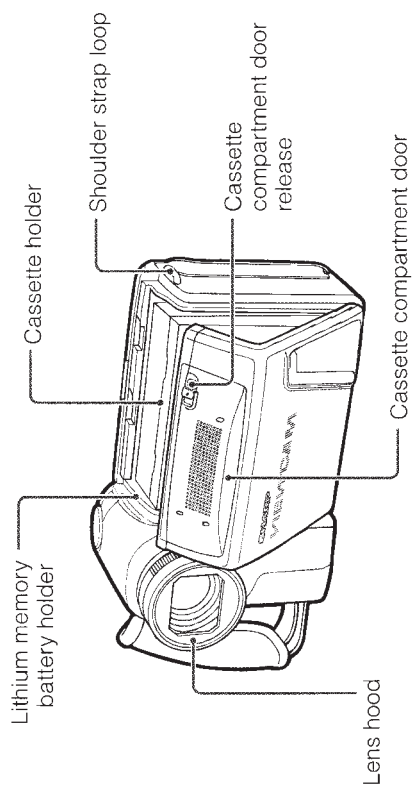
Front view



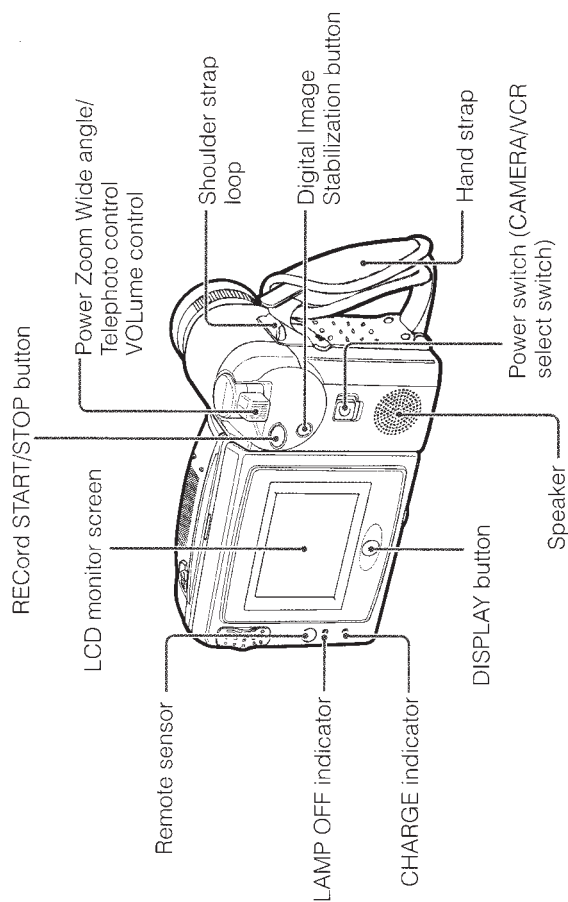
*About the PLUG IN POWER MIC jack

This external microphone jack outputs a DC voltage of 4.0 volt. It is for use with any 2.5-4.0 volt DC use condenser-type microphone with a 3.5 mm diameter plug. The use of other types of microphones may result in damage to the microphone or the VIEWCAM.

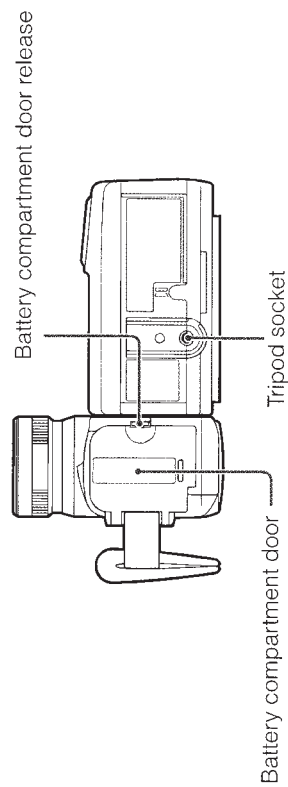
When the cassette compartment door is open



Rear view



Bottom view



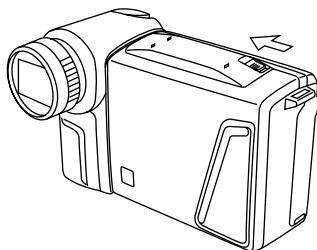
4. DISASSEMBLY OF THE SET

4-1. DISASSEMBLY OF THE VCR PARTS

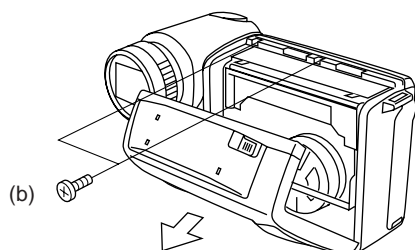
Note:

Before removing the cabinet, turn off the power supply, and ascertain that the battery has been removed.

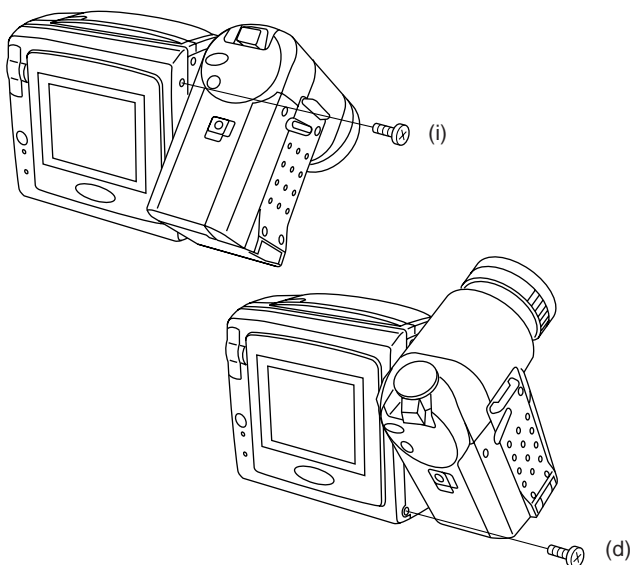
<1. Removal of the Cabinet L>



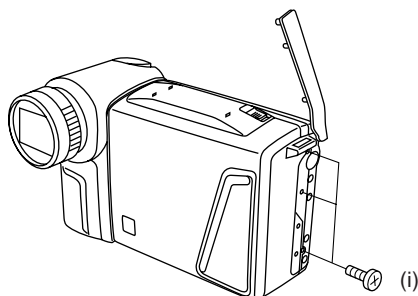
- (1) Slide the VCR lid knob in the arrow direction, open the VCR lid.



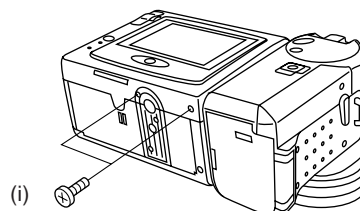
- (2) Remove the screws (b) LX-HZ0018TAF (2pcs.).



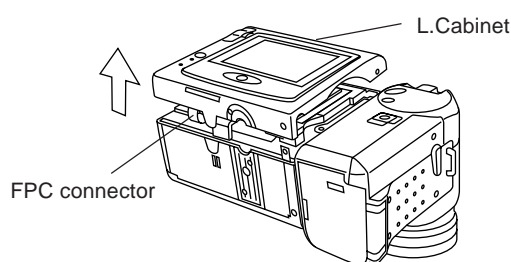
- (3) Turn the Camera section, and remove the screws (i) XiPSN20P04000 (1pc.), (d) XiPSF20P04000 (1pc.).



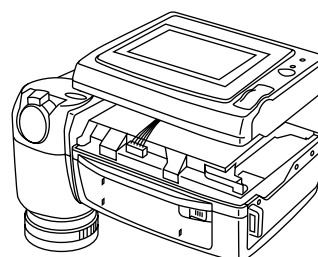
- (4) Remove the A.V. terminal cover and the screws (i) XiPSN20P04000 (3pcs.).



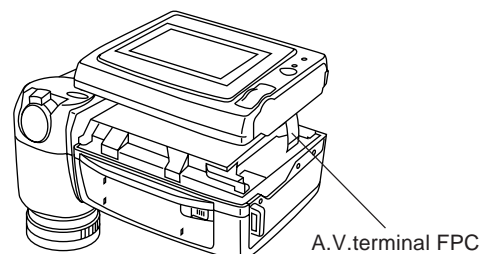
- (5) Remove the screws (i) XiPSN20P04000 (2pcs.).



- (6) Close the VCR lid.
(7) Lift about half of the L.Cabinet parts in the arrow direction, remove the FPC connector.



- (8) Remove the outside charging battery connector.

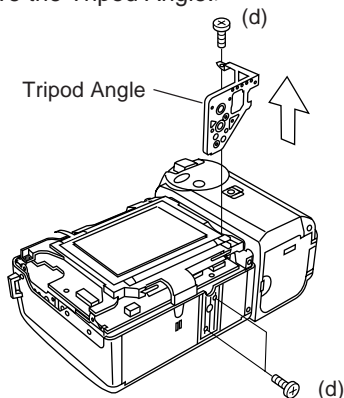


- (9) Remove the A.V. terminal FPC.

Note:

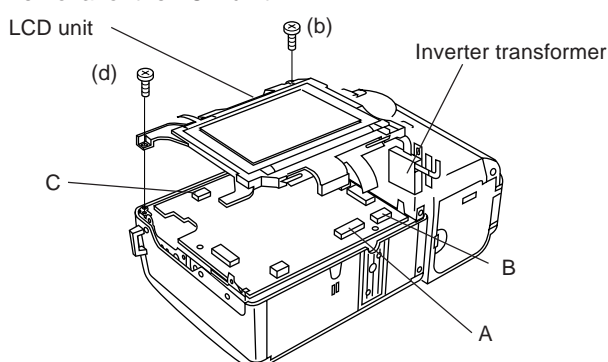
The FPCs and the wires of process (7), (8), and (9) are connecting with the L.Cabinet, and remove the L.Cabinet while it is floating from the main body.
If the L.Cabinet is drawn violently, they have some apprehensions of snap off the wires.

<2. Remove the Tripod Angle.>



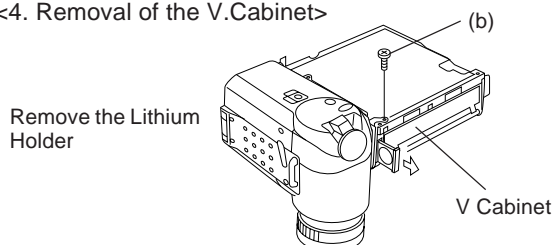
- (1) Remove the screws(d)XiPSF20P04000(3pcs.), pull the Tripod Angle.

<3. Removal of the LCD unit>

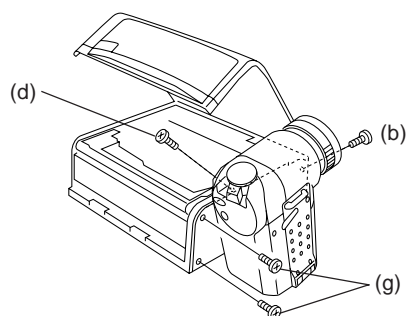


- (1) Remove the FPCs from connectors A,B and C.
(2) Remove the screws(d)XiPSF20P04000(1pc.) and (b)LX-HZ0018TAFF(1pc.).

<4. Removal of the V.Cabinet>



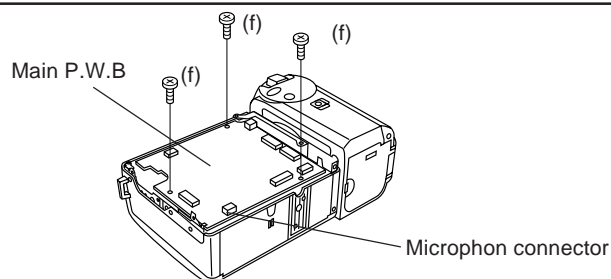
- (1) • Firstly, remove the Lithium Holder.
• Turn to upside the surface of V.lid, remove the V.Cabinet fixing screw (b)LX-HZ0018TAFF (1pc.).



- (2) Turn the Camera section to right angle, remove the Tilt side fixing screws (g)LX-HZ0045TAFF (2pcs.), the bottom side screw (b)LX-HZ0018TAFF(1pc.), open the VCR lid, and remove the slant wise screw (d)XiPSF20P04000 (1pc.).

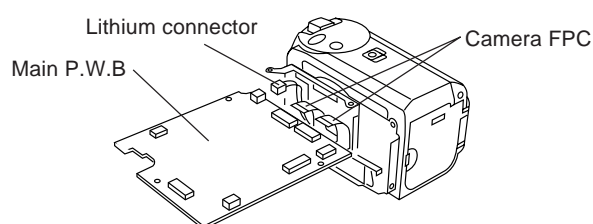
Note:

The Tilt section is setting with the parts of the Camera section .
(Never remove the parts of Camera section only.)

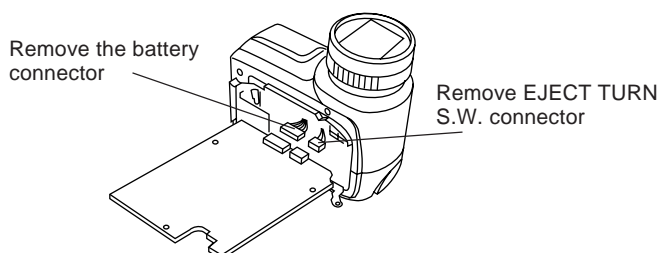


- (3) Remove the Microphon connector.
Remove the main P.W.B. fixing screws (f)XiPSD20P03000(3pcs.).
Lift the main P.W.B. in the arrow direction and remove the connection "B to B".

<5. Removal of the main P.W.B>

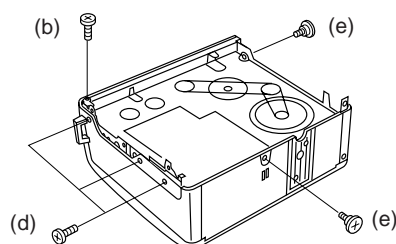


- (1) Remove the Camera FPCs(2pcs.) are connected with main P.W.B. and the Camera section, and remove the Lithium connector.

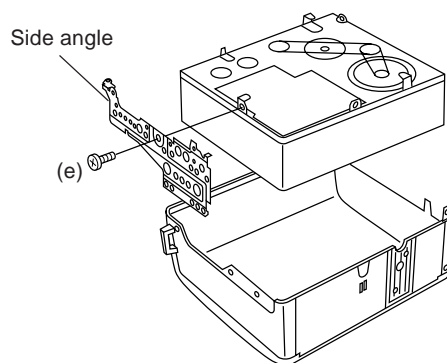


- (2) The same as process4., remove the battery connector in the reverse side of P.W.B. and EJECT TURN S.W. connector, and disconnect the Tilt section and main P.W.B..

<6. Removal of the Cabinet and Mechanism>

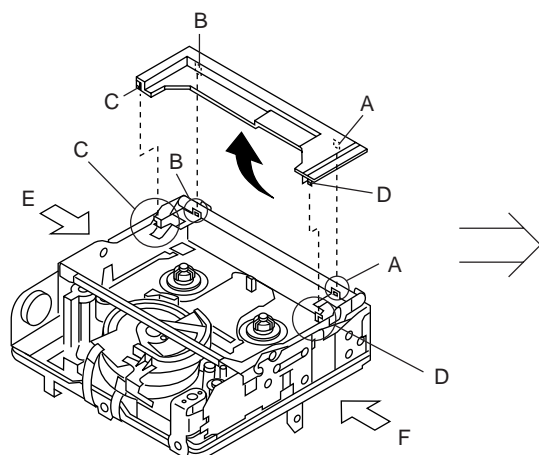


- (1) Remove the screws (b)LX-HZ0018TAFF (1pc.), (d) XiPSF20P04000 (3pcs.) and (e) LX-BZ0191TAFD (2pcs.).

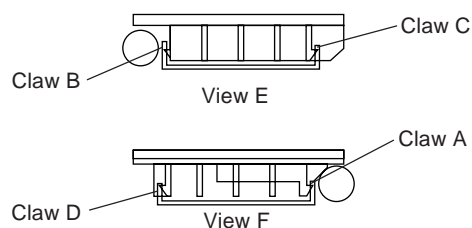


- (2) Pull the Mechanism from K.S.V.Cabinet, remove the screw(e)LX-BZ0191TAFD(1pc.) and the side angle.

<7. Removal of the cassette compartment lid>

**Note:**

When fixing the cassette compartment lid, first engage the claws A and B, and then engage the claws C and D, verify that the four claws (A, B, C and D) of the cassette compartment lid are securely engaged as shown in the view below.

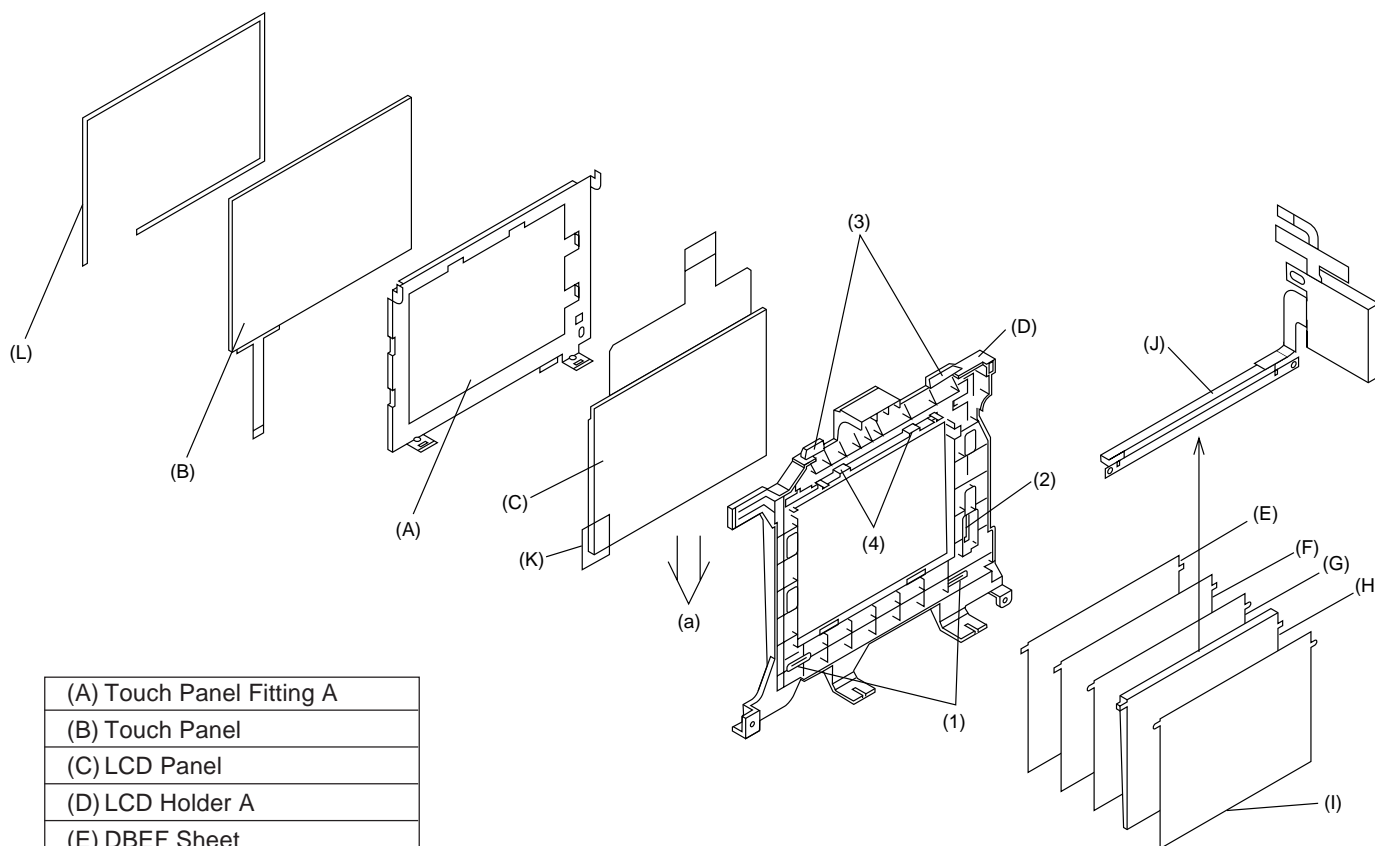


- (1) Using the slotted precision screwdriver, push and turn the two claws (C and D) which fasten the cassette compartment lid, and the cassette compartment lid will be removed from the hook area of the cassette component.
- (2) Turning the cassette compartment lid in the arrow direction, lift it, and the claws A and B will be disengaged to remove the cassette compartment lid.

Note:

Take care to prevent breaking the claws of the cassette compartment lid.

<8. Removal of LCD Unit>



(A) Touch Panel Fitting A
(B) Touch Panel
(C) LCD Panel
(D) LCD Holder A
(E) DBEF Sheet
(F) Prism Sheet
(G) Diffusion Sheet
(H) Light Guide Plate
(I) Reflection Polarizing Sheet
(J) Lamp Inverter
(K) LCD Holding Sheet
(L) Touch Panel Sheet

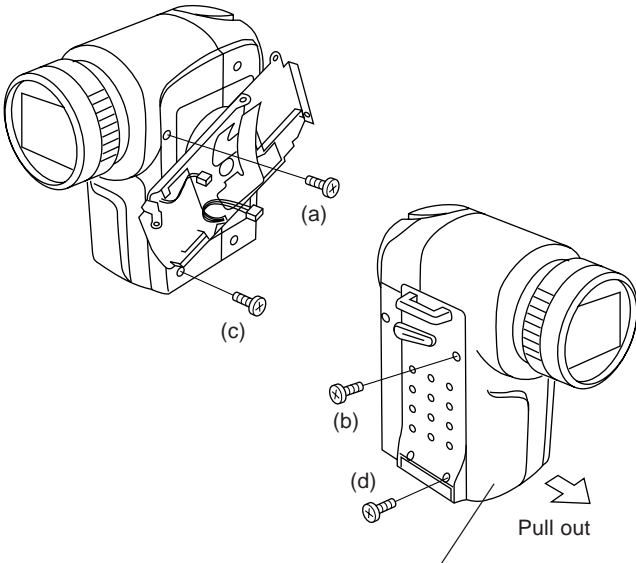
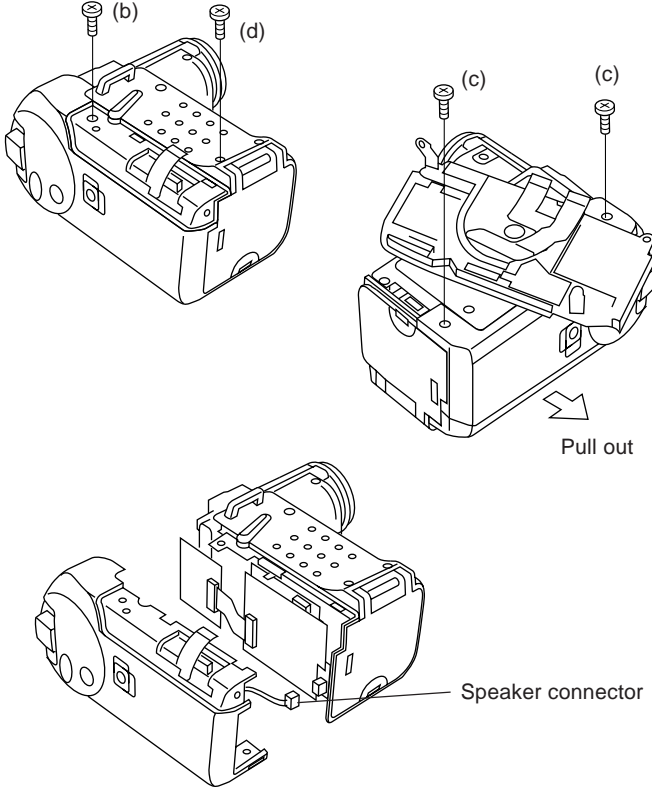
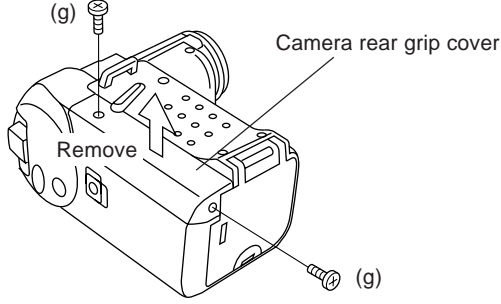
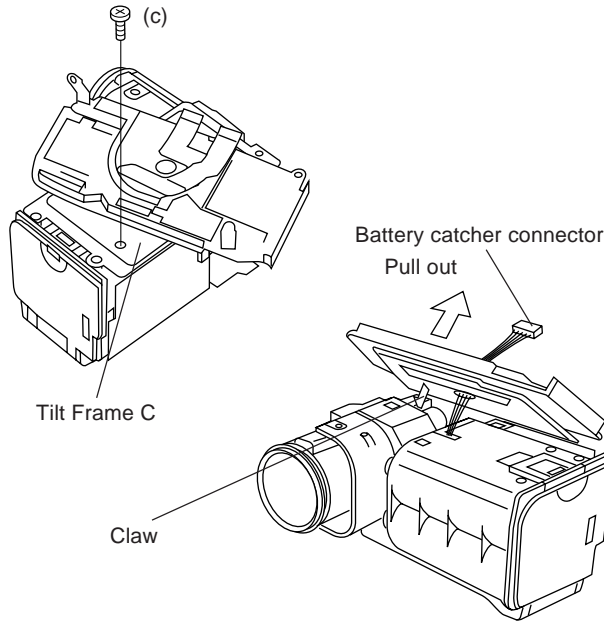
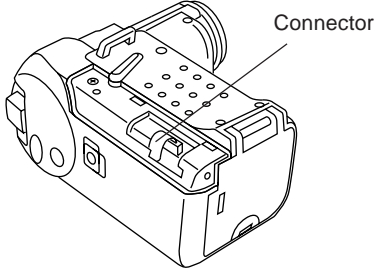
- At the time of removing from the LCD Holder A(D), and take off the hooks(1)(2pcs.).
- At the time of removing from the LCD Holder A(D), take off (K), remove the FPC from the hooks(3)(2pcs.), disengage the claw(2), and slide the LCD Panel (C) in the (a) direction to remove the LCD Holder A (D).
- At the time of removing from the LCD Holder A(D), remove the claws (4)(2pcs.).

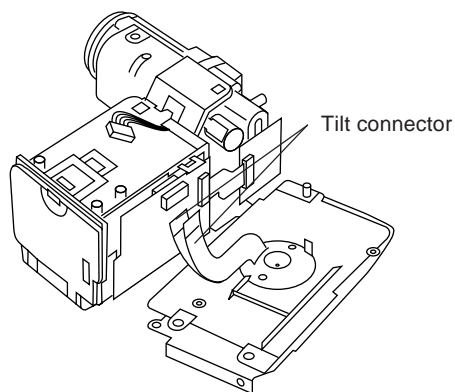
✳ Refer to the item **CABINET EXPLODED VIEW** about other parts.

4-2. REMOVAL OF THE CAMERA PARTS

Note:

Before removing the Cabinet, turn off the power supply, and ascertain that the battery has been removed.

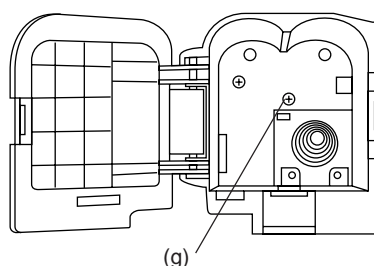
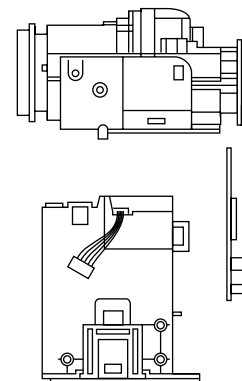
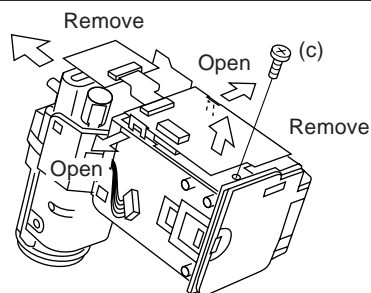
 <p>1. Remove the screws (b)LX-HZ0018TAFN(1pc.), (a)LX-HZ0018TAFN(1pc.), (c)LX-HZ0045TAFN(1pc.) and (d)XiPSF20P04000(1pc.), pull out the Front cabinet.</p>	 <p>4. Remove the screws (b)LX-HZ0018TAFN(1pc.), (c)LX-HZ0045TAFN(2pcs.) and (d)XiPSF20P04000(1pc.), pulling out the Camera rear Cabinet, and remove the Speaker connector.</p>
 <p>2. Remove the screws (g)LX-HZ0045TAFN(2pcs.) and the Camera rear grip cover .</p>	 <p>5. Remove the screw (c)LX-HZ0045TAFN(1pc.) and pull out the Tilt Frame C. Pull out the Tilt Frame C. at right angle, because of closing the claw. Then, pull out the battery catcher connector from the Tilt Frame C.</p>
 <p>3. Remove the connector.</p>	



6. Remove the Tilt connectors(2pcs.) as the Tilt Frame C. are floating in the air.

Note:

Take care to prevent breaking the FPC when the Tilt Frame C. is removing from them.



7. Remove the screws(g)LX-HZ0045TAFF(1pc.) and (c)LX-HZ0045TAFN(1pc.), opening the claws(2pcs.) to outward, remove the Lens unit with Camera P.W.B.

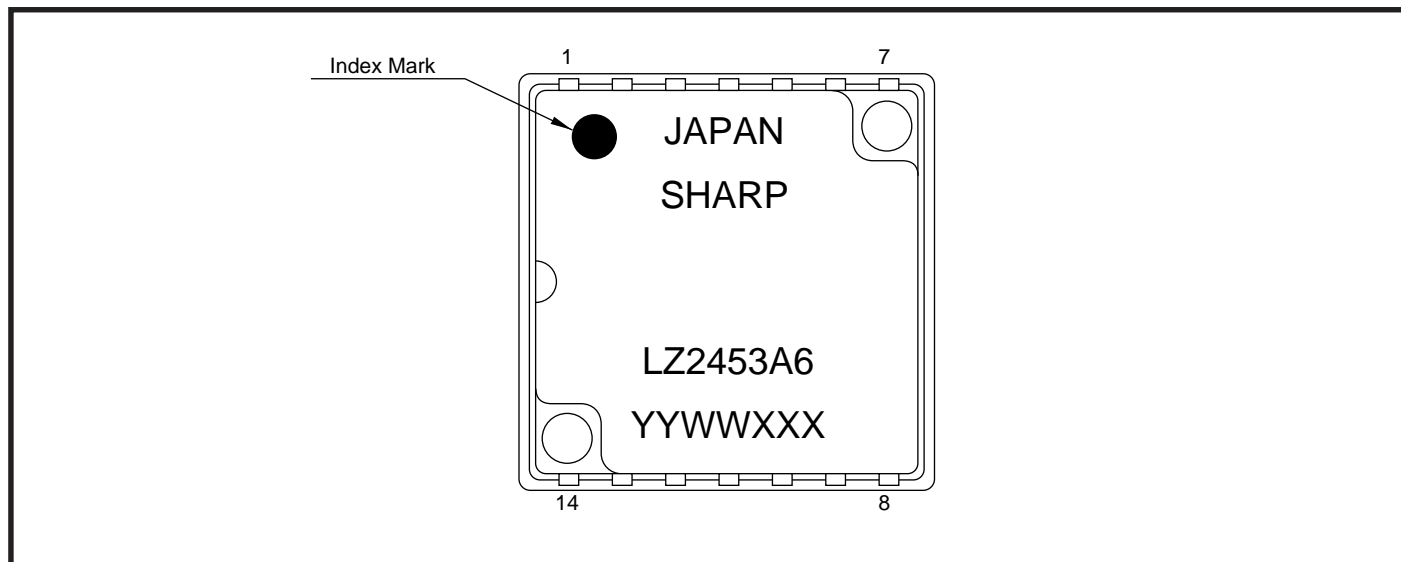
Screws

a	LX-HZ0018TAFN	M2x6 Tapping Screw, Silver
b	LX-HZ0018TAFF	M2x6 Tapping Screw, Black
c	LX-HZ0045TAFN	M2x4 Tapping Screw, Silver
d	XiPSF20P04000	M2x4 Small Screw, Black Zinc Plating
e	LX-BZ0191TAFD	M2 Special Screw
f	XiPSD20P03000	M2x3 Screw
g	LX-HZ0045TAFF	M2x4 Tapping Screw, Black
h	LX-HZ0013TAFF	M1.7x6 Tapping Screw, Black
i	XiPSN20P04000	M2x4 Small Screw, Silver
j	LX-HZ0050TAFN	M1.7x4 Tapping Screw, Silver
k	LX-BZ0236TAFD	M2x8 Screw
l	XiPSF20P03000	M2x3 Screw, Black

4-3. REPLACEMENT OF CCD SENSOR

4-3-1. Before replacement

- 1) The CCD image sensor is more sensitive to electrostatic breakage than C-MOS LSI. Therefore sufficient means to prevent electrostatic damage must be taken when it is replaced.
 - Ground the soldering iron.
 - Ground also the human body, using the wrist strap(through an 1 Mohm resistor).
 - Until the CCDsensor is mounted on the PWB, fit it to the conductive sponge, and short-circuit the foot lead.
- 2) Take utmost care so that the surface glass of CCD sensor and optical filter are not contaminated and damaged. If any contamination is found, for example fingerprint, wipe it off with silicon paper or clean chamois skin.
- 3) When replacing the CCD sensor, use the antistatic grounded soldring iron, and perform quickly soldering.



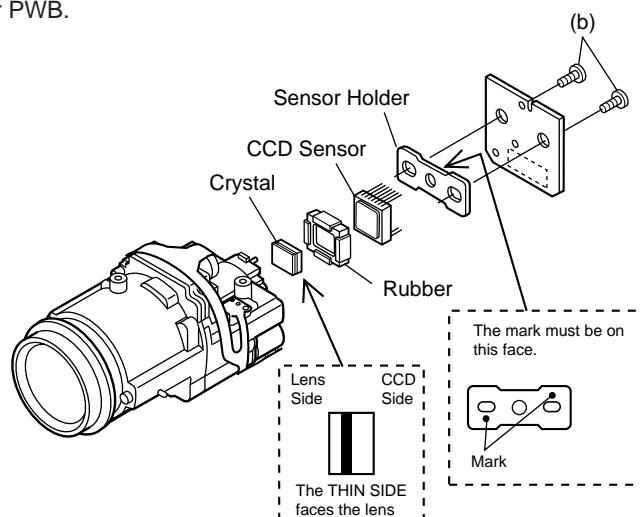
4-3-2. Removal of CCD

- 1) Unsolder the CCD sensor leads from the sensor PWB.
- 2) Take out the sensor PWB.
- 3) Remove the two screws (b), and remove the sensor holder and CCD sensor.

4-3-3. Mounting of CCD

- 1) Place the lens unit upright (since the CCD sensor mount ID faces upward, care must be taken so as not to damage the front lens of unit), put the crystal filter first and then the dust protection rubber into the CCD holder of lens unit. Set the crystal unit with its thin side toward the lens unit.
 - 2) Place the CCD sensor so that the its No. 1 pin is at the right lower (Positioning hole to be at right), and put the CCD sensor into the CCD holder. For smooth and tight fitting, press the right lower part of back of CCD sensor, and then press the left upper part.
- Note: Pay attention to the direction of CCD sensor.

- 3) Place the sensor holder so that its two round markings be visible, and fix the sensor holder with the two screws ((b)LX-HZ0013TAFF).
 - 4) Mount the sensor PWB so that the CCD sensor leads go thorough the PWB holes.
 - 5) Solder the CCD sensor lead to the sensor PWB.
- Note: Take care not to apply excessive heat.



5. MECHANISM ADJUSTMENT

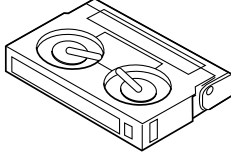
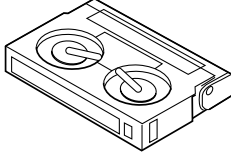

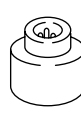
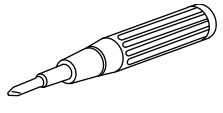
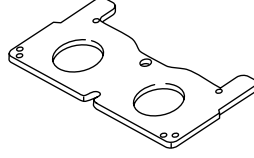
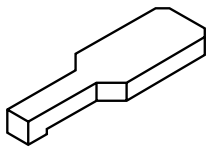
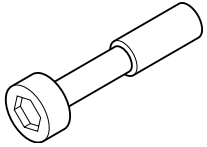
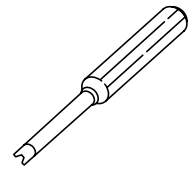
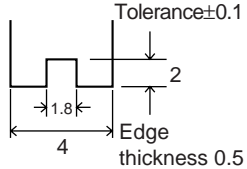
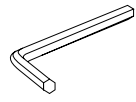
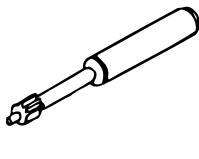
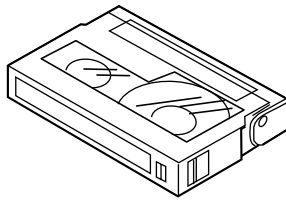
5-1. MECHANISM CHECKING/ADJUSTING JIGS, TOOLS AND PARTS

5-1-1. Mechanism checking/adjusting jigs and tools

<Note: The entries of list>

Configuration

1. Name
2. Part No.
3. Code
- * Model, Uses Remarks

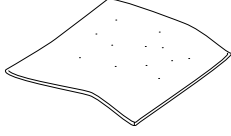
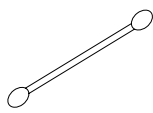
 <p>1. Cassette torquemeter for PB 2. JiG8T-012 3. CV * (10 g·cm/25 g·cm)</p>	 <p>1. Cassette torquemeter for VS-REW 2. JiG8T-032 3. CV * (50 g·cm/25 g·cm)</p>	 <p>1. Torque gauge 2. JiGTG0045 3. CN * For measurement of loading brake torque</p>	 <p>1. Torque gauge head 2. JiGTH-MX7U 3. BS * For torque gauge listed left</p>	 <p>1. Torque driver (1.5 kg·cm) 2. JiGTD1500RT0H 3. CB</p>														
 <p>1. Master plane 2. JiGMP-MX7U 3. CG * For adjustment of Tu guide height, Si roller height and checking of reel disk height</p>	 <p>1. Height adjusting jig 2. 9DAGH-E31S 3. BM * For adjustment of Tu guide height and Si roller height</p>	 <p>1. Tu guide height adjusting driver 2. 9EQDRIVER-V712 3. BL</p>	 <p>1. Guide roller height adjusting driver 2. JiGDRIVERHMX7U 3. BU * Bit shape (See the figure above.)</p>	 <p>Tolerance±0.1 2 1.8 4 Edge thickness 0.5</p>														
 <p>1. Hex wrench 3. — * For loosening or tightening of Motor stator (1.3mm)</p>	 <p>1. Tension Band and Plate Adjusting Jig 2. JiGDRIVERMX7U2 3. BN</p>	 <p>1. Alignment tape 2. VR2ABOPS 3. BT</p> <table border="1"><thead><tr><th colspan="4">TAPE CONTENTS</th></tr><tr><th>VIDEO IMAGE</th><th colspan="2">AUDIO</th><th>TIME</th></tr></thead><tbody><tr><td rowspan="2">MONOSCOPE</td><td>L-CH</td><td>400Hz</td><td rowspan="2">30MIN</td></tr><tr><td>R-CH</td><td>1,000Hz</td></tr></tbody></table>	TAPE CONTENTS				VIDEO IMAGE	AUDIO		TIME	MONOSCOPE	L-CH	400Hz	30MIN	R-CH	1,000Hz	<p><Others></p> <p>(1) Slide calipers (2) High-precision screw-drivers (Phillips head, slotted head) (3) Radio pliers (with thin jaws) (4) A pair of tweezers</p>	
TAPE CONTENTS																		
VIDEO IMAGE	AUDIO		TIME															
MONOSCOPE	L-CH	400Hz	30MIN															
	R-CH	1,000Hz																

5-1-2. Parts for periodic inspection and maintenance.

Configuration

1. Name
2. Part No.
3. Code
- * Model, Uses Remarks

<Note: The entries of list>

<ol style="list-style-type: none"> 1. Oil COSMOHYDRO HV100 * Cosmo Oil Co., Ltd. 	<ol style="list-style-type: none"> 1. Screw locking agent (1401B) * Three Bond 	 <ol style="list-style-type: none"> 1. Cleaning paper 2. JiGDUSPER 3. AP * Dusper Σ (Sigma) (Ozu Co., Ltd.) 	 <ol style="list-style-type: none"> 1. Superfine swab * Commercially available item
<ol style="list-style-type: none"> 1. Greases Morycoat YM-103/X5-6020 * Dow Coating 	<ol style="list-style-type: none"> 1. Cleaning liquid (Industrial-use ethyl alcohol) 		

5-2. ITEMS AND TIMINGS OF INSPECTION AND MAINTENANCE

The mechanism of VCR needs the following periodic inspection and maintenance in order that it maintains its high quality. Also, after the machine is repaired, execute the following maintenance and checks regardless of how long it has been used.

5-2-1. Inspection and maintenance list

	Checking/Maintenance point	Usage time (hrs.)					Possible symptom encountered	Remarks
		500	1,000	1,500	2,000	3,000		
Tape travel system	Tape travelling route (Refer to Section)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> • Lateral noise • Unclean head • Screen shaking 	Rollers • If abnormal rotation or deflection (significant) is found, replace the roller. Other than rollers • Clean the tape contacting areas. Be sure to use the specified cleaning agent.
	Drum (Refer to Section)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
	Video head	<input type="checkbox"/>	<input type="checkbox"/> ○	<input type="checkbox"/>	<input type="checkbox"/> ○	<input type="checkbox"/> ○	<ul style="list-style-type: none"> • Improper S/N ratio • No color appears. 	
Driving system	Timing belt	—	★	—	★	★	<ul style="list-style-type: none"> • Tape does not run. • Tape slackens. • Screen shakes. 	• Replace if failure is found.
	Pinch roller	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> ○	<input type="checkbox"/>		
	Capstan D.D. motor	—	○	—	○	○		
	Relay Pulle shaft Pulle gear shaft	—	△	—	△	△	• Abnormal sound	• Apply oil. (Oil : COSMOHYDRO HV100) Note: After oil is applied to the drive gear shaft, slightly wipe it off with swab.
	Drive gear shaft	—	△	—	△	△		
	Loading motor	—	★○	—	★○	★○	<ul style="list-style-type: none"> • Not ejectable • The specific mode cannot be set. 	• Replace if failure (abnormal sound) is detected.
Performance check	Abnormal sound	★	★	★	★	★		• If conformance to the standard is not ensured, replace part.
	PB/VS-REW take-up torque	—	★	—	★	★		
	PB/VS-REW back tension torque	—	★	—	★	★		
	Tu brake	—	★	—	★	★		
	HC (Head Cleaner)	—	○	—	○	○		

Oil: COSMOHYDRO HV100

Greases: MORYCOAT YM-103/X5-6020

Screw locking agent: THREE BOND 1401B

Cleaning liquid: Industrial-use ethyl alcohol

○ : Replace.

□ : Clean.

△ : Apply oil.

★ : Check.

5-2-2. Notes and cautions

- (1) Any cut washers, once removed for parts replacement or for other reason, must be replaced with new ones.
 - (2) The mechanism of this VCR does not involve any volume adjustment. If the specified range is not satisfied, either cleaning or replacing the parts is required.
 - (3) Oils
 - a) Be sure to use the specified oils (different viscosity may cause troubles).
 - b) For the bearings, be sure to use oil that is free from dust and other foreign substances. (Dust or foreign substance contained in the oil may cause wear or seizure of the bearings.)
 - c) A drop of oil represents the amount of oil which is held on the needle top as shown in the figure 1.
 - (4) The circuit repair must be executed without removing the V frame.
 - (5) For operating the mechanism alone, actuate it with the motor. The terminal-to-terminal voltage must be DC4V or less.
 - (6) When installing the cassette control, press the part A shown in Figure 2.
- *Do not press other parts.
- (7) Take care so that the whole mechanism is not deformed.

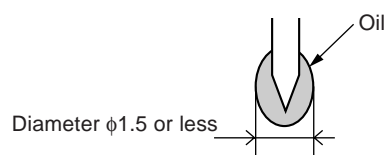


Figure 1

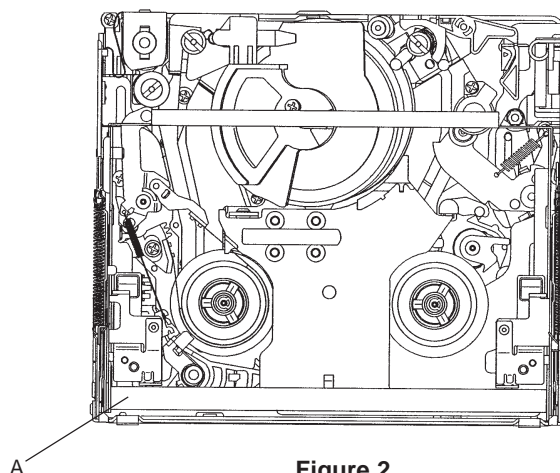


Figure 2

5-3. MECHANISM CHECKS AND ADJUSTMENTS

The description given below relates to the general field services, but does not relate to the adjustment and replacement that require high level equipments, jigs, and technical skills.

In order to maintain the initial characteristics of the machine, it is necessary to execute the maintenance and check and to prevent damage to tapes and other parts. For adjustments which need jigs, be sure to use the jigs.

Notes and cautions

- (1) For mechanism checks and adjustments, be sure to use the AC adapter as the power supply.
- (2) For running the tape, be sure to install the cassette control ass'y in advance. (If the cassette control ass'y is to be removed subsequently after its installation.)

5-3-1. Checking the reel disk height

- (1) Remove the cassette control ass'y.
- (2) Taking due care not to let the master plane touch the tape running areas such as the drum and the guide rollers, position the master plane so that the two guides (A and B in the figure 1) are set in the holes of master plane, then properly set it in the mechanism.
- (3) Using the slide callipers or the like, check that the distance from the upper surface of master plane to the reel support surface of the S/Tu reel disk is within the specified range. (Figure 2)

Note:

When measuring, do not apply excessive force to the reel support surface of reel disk.

- (4) If the measurement is not within the specified range, replace the reel disk ass'y.
- (5) Check the items (2) to (4) above in the following two modes.
 - a) Standby mode
 - b) Playback (recording) mode

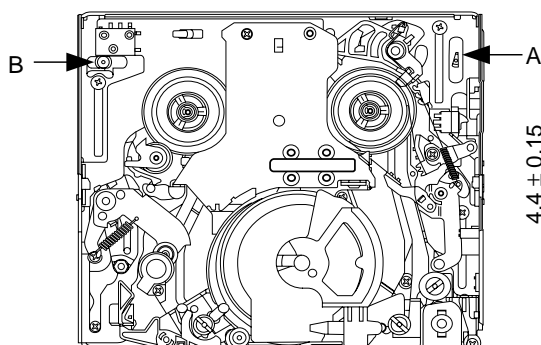


Figure 1

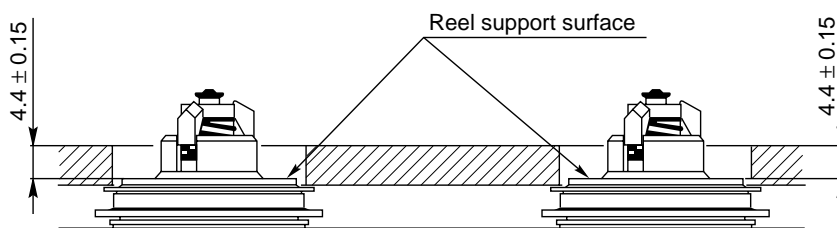


Figure 2

5-3-2. Checking the take-up torque for playback (recording)

- (1) Set the torque cassette (JiG8T-012) in position, and check in the SP-mode recording mode (tape recorded in SP mode) that the torque at the tape taking-up side is within the standard range.

Standard of take-up torque for SP-mode recording (playback)

9 ± 3 g·cm with ripples less than 4 g·cm

(If the torque ripples appear, read the center value of torque between the ripples.)

5-3-3. Checking and adjusting the back tension torque for playback (recording)

(1) Checking

- 1) Set the torque cassette (JiG8T-012) in position, and check in the SP-mode recording mode (tape recorded in SP mode) that the torque at the tape supply side is within the standard range.

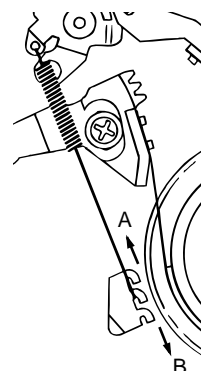
Standard of back tension torque for SP-mode recording (playback):

8 ± 2 g·cm with ripples of less than 2 g·cm

(Torque ripple must be within 8 ± 2 g·cm)

(2) Adjustment

- 1) If the back tension torque is not within the standard range, adjust the tension spring hooking position. If the back tension is too high, hook the spring in the direction A. If the back tension is too low, hook the spring in the direction B.



Note:

1. After back tension torque adjustment be sure to check the tension pole position.

5-3-4. Checking and adjusting the tension pole position

(1) Check

When winding of P6-120 tape is started, check whether the tension pole is in the specified position against Si roller as shown or not.

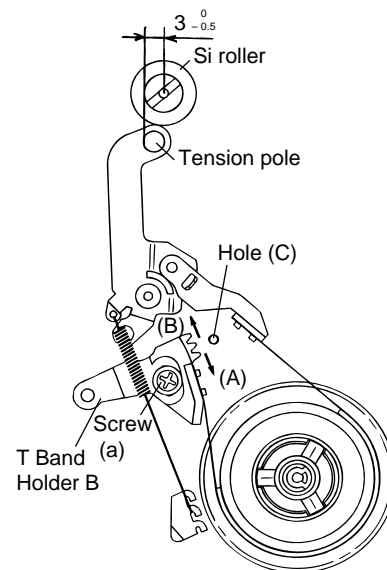
If it is not in the specified position, remove the cassette and adjust the position in the following procedure.

(2) Adjustment

1. Don't set up any tape, and select the PB mode. (Refer to Item 5-5-1-(4).)
2. Slightly loosen the screw (a) (to such a strength as the T band holder B can be moved).
3. If the tension pole is in the inner position than specified, dislocate the T band holder B in the arrow (A) direction and if it is in the outer position, dislocate it in the arrow (B) position. Then, tighten the screw (a). (For reference, dislocate it 0.4 to 0.8 mm outer from the position specified above.) For the position adjustment, it is convenient to use the position adjustment screwdriver (JiGDRIVERMX7U2). (Set it in the hole (C).)
4. Check the position in the "(1) Check" procedure described above.
5. If it is not in the specified position, repeat the adjusting procedure 1 thru 3.

Note:

- Tightening torque of screw (a) 70 mN·m
- To check the position, be sure to run the tape.
- If the cassette compartment assembly is removed, it makes the work easier. (Refer to Item 5-5-3.)



5-3-5. Checking the take-up torque for rewind playback (VS-REW)

- (1) Remove the cassette compartment ass'y and set to the sensor OFF mode.

- (2) Set the torque gauge (JiGTG0045) on the S reel disk, and check in the rewind playback (VS-REW) that the torque at the supply side is within the specified range.

Standard of take-up torque in rewind playback (SP mode)

31 ± 5 g·cm with ripples less than 5 g·cm.

(If the torque ripples appear, read the center value of torque between the ripples.)

5-3-6. Checking the back tension torque for rewind playback (VS-REW)

- (1) Set the torque cassette (JiG8T-032) in position, and check in the rewind playback (VS-REW) mode that the torque at the tape take-up side is within the specified range.

Standard of back tension torque in rewind playback (SP mode):

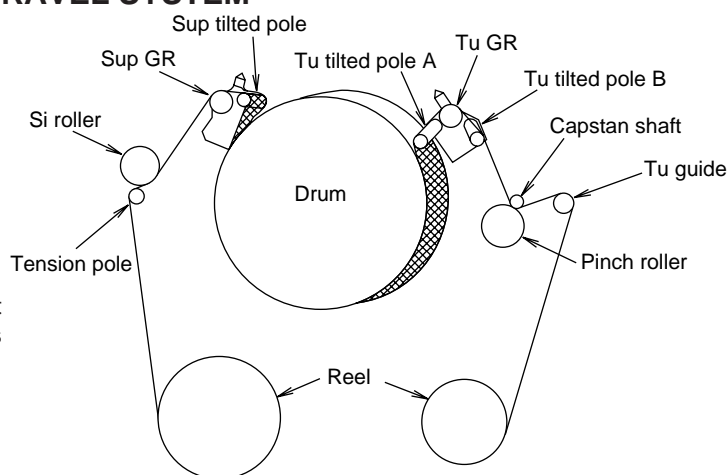
14 ± 5 g·cm with ripples less than 5 g·cm

(If the torque ripples appear, read the center value of torque between the ripples.)

5-4. ADJUSTMENT OF MECHANISM TAPE TRAVEL SYSTEM

5-4-1. Preparation for adjustment

- (1) Clean the tape running areas (guide poles, rollers, drum, Capstan shaft, Pinch roller) (Figure 1)
- (2) Connect the oscilloscope to the following TPs.
RF output TL7406
H-SW-P TL7446
GND TL7452
- (3) Playback the alignment tape (VR2ABOPS).
- (4) Ascertain that each guide is free from remarkable curl.
- (5) Ascertain that the RF waveform of inlet and outlet sides is flat on the oscilloscope (Figure 2, (a)). Unless the waveform is flat, (Figure 2, (b), (c)), make an adjustment as follows.



Tape travel system (Figure 1)

5-4-2. Adjusting the Sup GR and Tu GR

- (1) Turn the Sup and Tu guide rollers to get the flat waveform at the inlet and outlet sides.

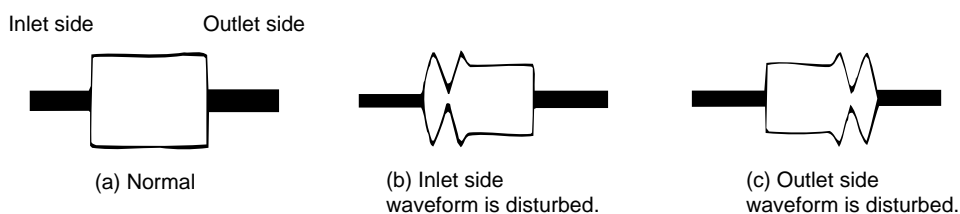


Figure 2

5-4-3. Adjusting the Si roller height

After replacement of Si roller preset and adjust the Si roller height.

- (1) Si roller height presetting

Adjust the height from the upper surface of mechanism chassis to the upper surface of lower flange with the aid of jig. Then lower it by 90° (clockwise).

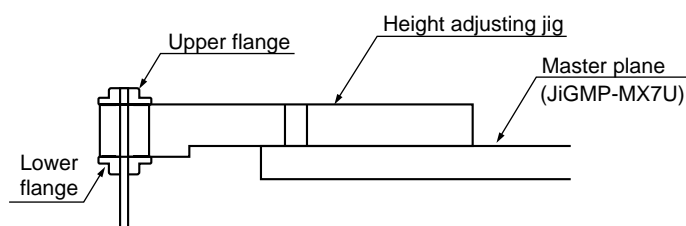


Figure 3

- (2) Adjusting the Si roller

- 1 Playback the tape to set the V/SR mode.

- 2 Ascertain that the tape is not folded on the lower flange (B) of Si roller. (Figure 4)

If tape folding is found, turn the upper flange (A) of Si roller with the driver (clockwise) to eliminate the folding.

- 3 Playback the alignment tape (VR2ABOPS).

- 4 Adjust the Sup GR and Tu GR by the procedure described in section 4-2 above.

- 5 After V/S F,R perform playback so as to ascertain that the waveform rises horizontally within 2 seconds.

- 6 Unless the normal waveform is obtained (Figure 5), turn counterclockwise the upper flange (A) of Si roller, and repeat the step (5) above. Repeat the steps (5) and (6) until the normal waveform is obtained. At this time ascertain that the inlet travel does not change in the normal playback state. If any change is found, adjust the Sup GR, and redo the step (5).

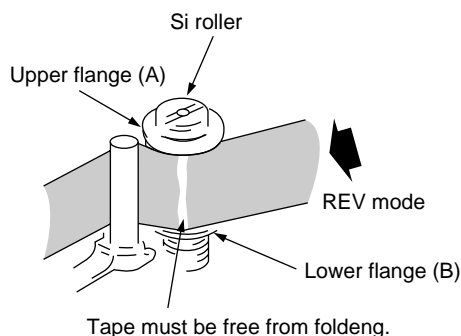


Figure 4

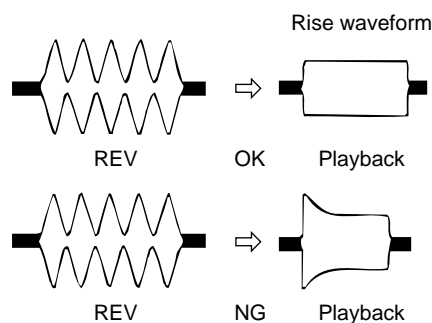


Figure 5

5-4-4. Adjusting the Tu guide

After replacement of Tu guide preset and adjust the height.

(1) Tu guide height presetting (Figure 6)

Adjust the height from the upper surface of mechanism chassis to the upper surface of lower flange with the aid of jig.

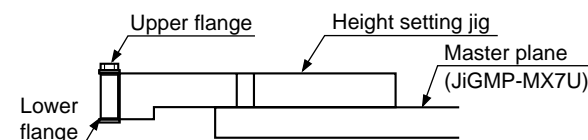


Figure 6

(2) Adjusting the Tu guide (Figure 7)

- 1 Playback the alignment tape (VR2ABOPS).
- 2 Check that the tape runs at the same height near the capstan shaft in case of V/S F and V/S R.
- 3 If the tape running position in case of V/S R is higher than the tape running position in case of V/S F, turn clockwise the Tu guide nat. If the tape running position in case of V/S R is lower than the running position in case of V/S F, turn counterclockwise the Tu guide nat.

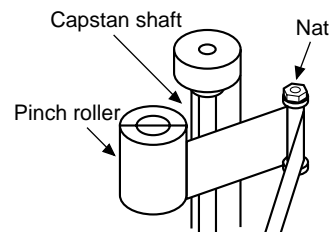


Figure 7

5-4-5. Checking the V/S F and R waveforms (Figure 8)

- (1) Playback alignment tape (VR2ABOPS), and set the V/S R mode. At this time ascertain that the waveform crest pitch is kept constant for more than 5 seconds.
 - (2) Set the V/S F mode. At this time ascertain that the waveform crest pitch is kept constant for more than 5 seconds.
- Unless the constant pitch is obtained, execute the checks of Section 4-2, 3, and 4.

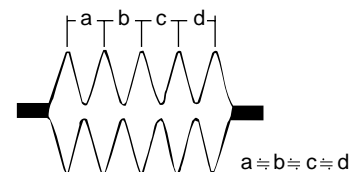


Figure 8

5-4-6. Checking after adjustment

(1) Envelope check

- 1 Playback the alignment tape (VR2ABOPS).
- 2 Ascertain that the envelope maximum to minimum ratio is 65% or more. (Figure 9)
- 3 Ascertain that the waveform does not change remarkably. (Figure 10)

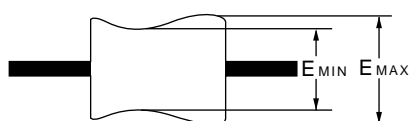


Figure 9 $\frac{E_{MIN}}{E_{MAX}} \geq 65 (\%)$

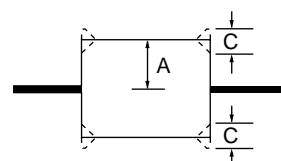


Figure 10 $C \leq 1/8A$

(2) Rise check

- 1 Playback the alignment tape (VR2ABOPS).
- 2 Once eject the cassette, and then load it again.
- 3 Set the playback mode, and ascertain that the RF waveform rises horizontally within 2 seconds. At this time ascertain that there is no tape slackness near the pinch roller.
- 4 After V/S F, R and FF/REW execute playback, and ascertain that the RF waveform rises horizontally within 2 seconds. At this time ascertain that there is no tape slackness near the pinch roller.

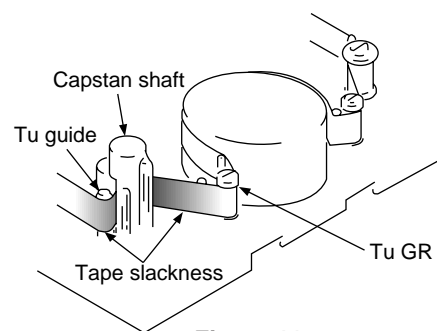


Figure 11

(3) Checking the tape travel

- 1 When the tape is played back, ascertain that tape lift and tape curl of 0.3 mm or more do not occur at the lower flange of Si roller, upper flange of Sup GR, upper flange of Tu GR, and upper/lower flange of Tu guide.
- 2 In case of V/S F and R ascertain that no curl is found at each flange.

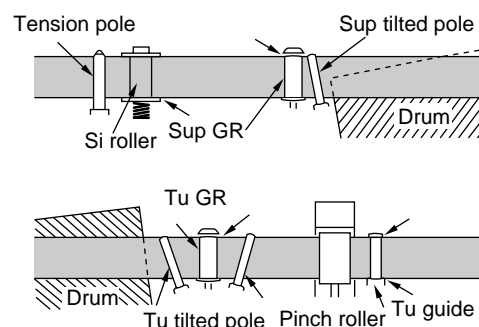


Figure 12

5-4-7. Checking and adjusting the playback switching point

Refer to the description of playback switching point adjustment in section of VCR circuit adjustment.

5-5. MECHANISM ASSEMBLING AND PARTS REPLACEMENT (DISASSEMBLING AND ASSEMBLING)

Below is given an explanation of assembling of mechanism and its parts replacement.
The removal of cabinet and Circuit Board is explained in the relevant service manual.

Notes

- 1 After removal of cut washers be sure to replace them with new ones.
- 2 Do not place the mechanism upside down on the table. Otherwise, the mechanism part may be deformed or damaged, resulting in malfunction.
- 3 When assembling, take care so that screw, washer or other foreign substance do not enter. Otherwise mechanism malfunction may occur.
- 4 Be sure to use the specified cleaning liquid, oil, grease and screw lock as listed below. Otherwise mechanism malfunction may occur.

Oil: Cosmo Oil Co., Ltd.
COSMOHYDRO HV100

Greases: Dow Coating
MORYCOAT YM-103/X5-6020

Screw lock: THREE BOND
1401B

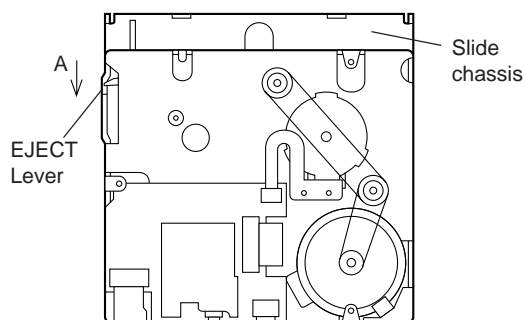
Cleaning liquid: Industrial-use ethyl alcohol

5-5-1. Mechanism modes

To actuate the mechanism, apply DC3 to 4V to the L motor. At this time the L motor connector must have been disconnected in advance.
Below is given an explanation of the mechanism mode necessary for mechanism check, adjustment and replacement.

(1). **EJ** (Eject) mode (See Figure 1)

In this mode, it is mechanically positioned to eject the cassette. It is the position where the EJECT lever is moved the farthest in the direction A in the S/B mode. (In this mode, the cassette compartment assembly can not be locked.)

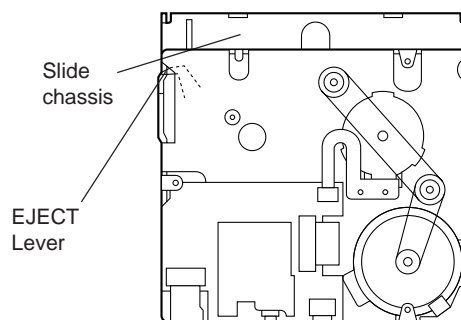


EJ mode

Figure 1

(2). **S/B** (Standby) mode (See Figure 2)

When the cassette is loaded, the mechanism is set to the S/B mode. In this mode the slide chassis is most far from the drum. In this mode the Eject lever is in position shown in Figure 2 (in position where the cassette control ass'y can be locked).

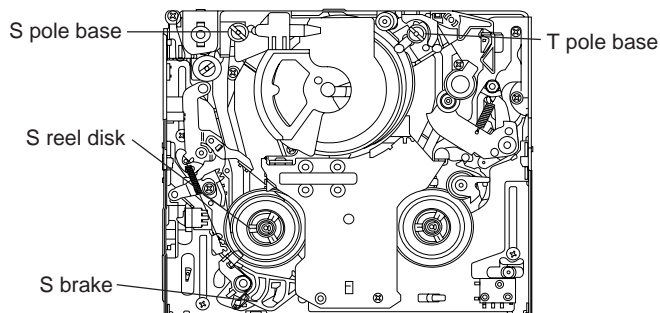


S/B mode

Figure 2

(3). **STOP** mode (See Figure 3)

In the STOP mode the S.T pole base is depressed in the STOP position (or Rec Lock position in CAMERA mode), and the S brake is in contact with the S reel disk.

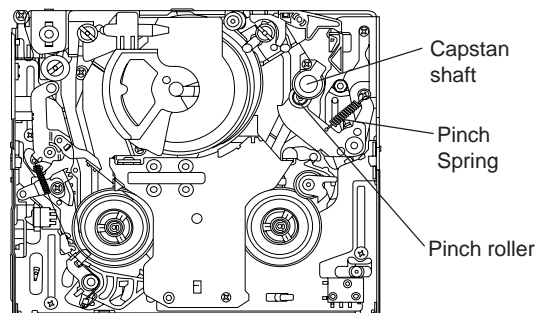


STOP mode

Figure 3

(4). **PB** mode (See Figure 4)

In this mode, it is positioned for the replay, record and so on. It is the mechanical position where the pinch roller is pressed against the capstan shaft to make the pinch-pressing spring the most longest.



PB mode

Figure 4

5-5-2. Cassette control ass'y

<Disassembling>

- (1) Set the unit to the EJECT mode, and let the housing stand upright. Or set the unit to the STANDBY mode, press the lock lever in the arrow direction, and let the housing stand upright. (See Fig. 5: in the direction (a) or (b)) (When pushing in the direction (a), slightly lift the housing by hand to release the lock lever.)
- (2) Remove the four screws (2) and take out the down guide (3).
- (3) Slide the two link support shafts (c) and the two roller shafts (d) to the round openings (g) on their respective slide chassis slits (two at (e) and two at (f)).
- (4) Deflect the roller shafts (d) a little inward to get them out of the round openings (g) on the slide chassis. (Be careful not to deform the inner links.)

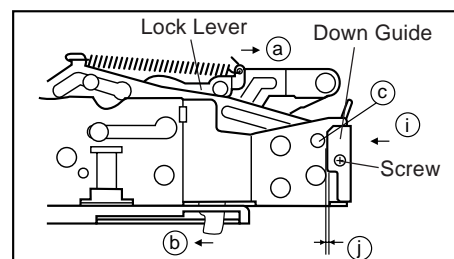


Figure 5. Lock lever section

<Reassembling>

- (1) Set the unit to the STANDBY mode.
 - (2) Deflect the roller shafts (d) a little inward, and fit them into the round openings (g) on the slide chassis. (Be careful not to deform the inner links.)
 - (3) Align the flanges of roller shafts (d) with the slide chassis slits (f). While sliding the flanges, fit the support shafts (c) in the slide chassis slits (e), and slide them until they reach the slits.
 - (4) Attach the down guide. (While pressing the guide in the direction (i), tighten the screws until the gap (j) between the down guide (3) and the support shafts (c) becomes zero.)
- Tightening torque: 70 ± 7 mN·m (0.7 ± 0.07 kg·cm)

Screw tightening
torque (4 locations)
 0.069 ± 0.007 N·m
(0.7 ± 0.07 kg·cm)

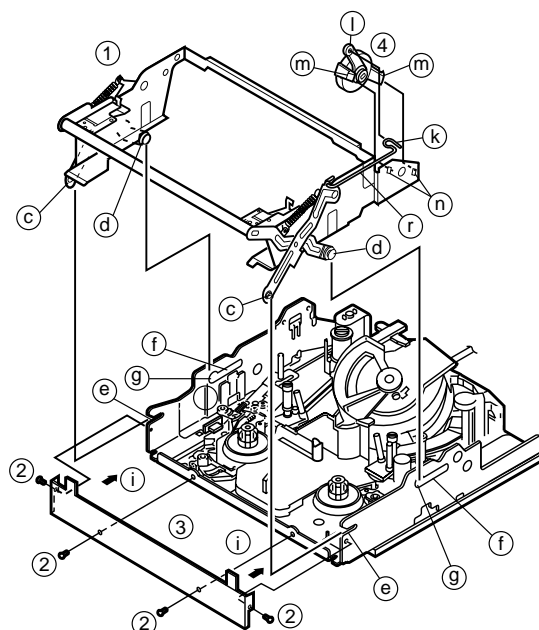
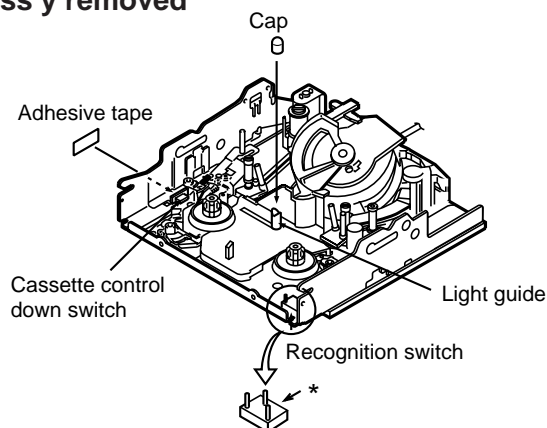


Figure 6

5-5-3. Actuating the mechanism with the cassette control ass'y removed

- (1) Turn on the power supply with the cabinet and camera unit removed, referring to the Service Manual (so as to actuate the mechanism).
- (2) Put the cap on the light guide.
- (3) Press the cassette control down switch through the adhesive tape in the arrow direction so as to turn it on. At this time take care to avoid contact with the cassette. Keep the switch pressed (if the switch is turned off, unloading occurs).

Note: To set the Rec mode, press the pin (marked with the asterisk *) of recognition switch (this operation is not necessary in other modes).



5-5-4. Drum and Drum base

<Removal>

* To replace the upper drum, be sure to put on gloves. Due care is required so that the drum is not damaged.

(1) Drum base

Remove the 3 mounting screws as shown in Figure 1, and remove the drum base.

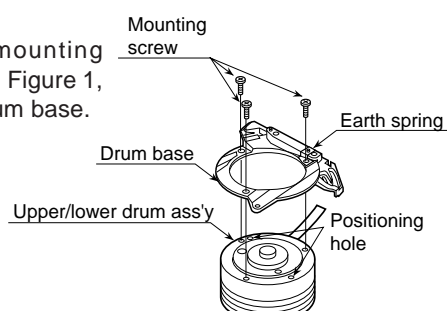


Figure 1

(2) Drum motor stator

Remove the stator mounting screw with the hexagonal wrench as shown in Figure 2, remove the motor stator.

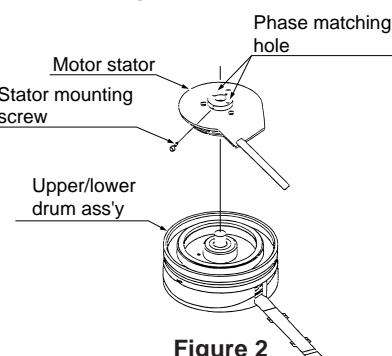


Figure 2

- (3) Upper drum ass'y
Remove the upper drum ass'y from the lower drum ass'y as shown in Figure 3.
At this time take care so as not to lose the gap shim.

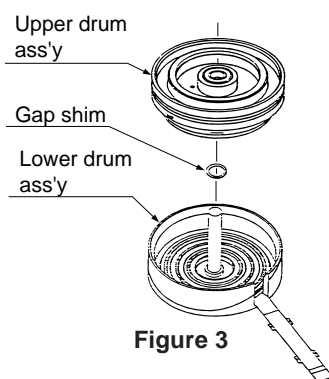


Figure 3

- (4) Motor rotor ass'y and rotary transformer rotor ass'y
Remove the 2 rotor mounting screws as shown in Figure 4, and remove the motor rotor and the rotary transformer rotor ass'y.

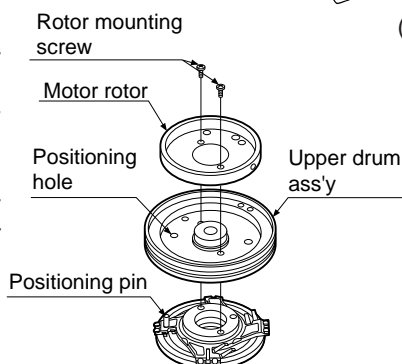


Figure 4

- (5) Balancer
Remove the balancer mounting screw as shown in Figure 5, and remove the balancer.

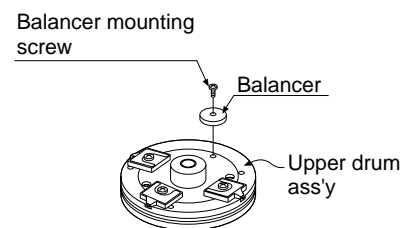


Figure 5

- (6) Lower drum ass'y
Remove the FPC mounting screw from the lower drum ass'y as shown in Figure 6.

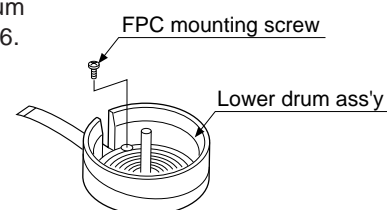


Figure 6

<Installation>

Install the upper drum in the reverse order of removal.

- (1) Balancer

Mount the balancer to the upper drum ass'y with the balancer mounting screw. The screw tightening torque must be 0.1N·m (tighting torque 1kg·cm). (Figure 5)

- (2) Motor rotor, rotary transformer rotor ass'y

Clean the contact surfaces of rotor ass'y holder and upper drum ass'y, and ascertain that there are no contamination and flaws. Next, adjust the phase so that the positioning pin of rotor ass'y is inserted into the positioning hole of upper drum, and tight fit the rotor ass'y to the lower surface of upper drum ass'y (Figure 7).

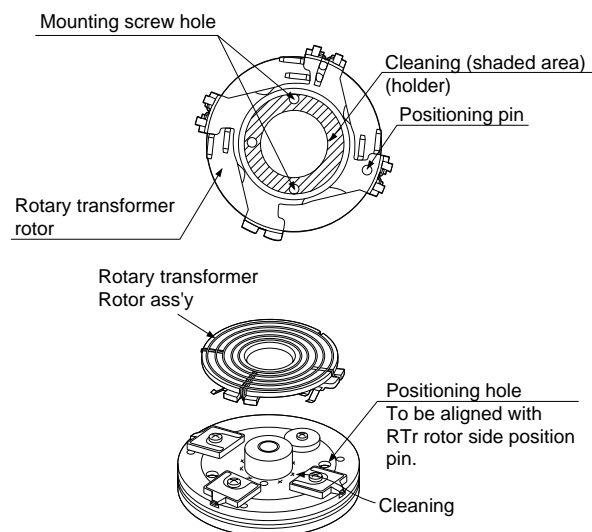


Figure 7

In this state put the motor rotor on the upper surface of upper drum ass'y, and tighten the mounting screw. At this time make sure that the head screw in the three places is visible through the motor rotor hole (Figure 8). The screw tightening torque must be 0.1N·m (1 kg·cm).

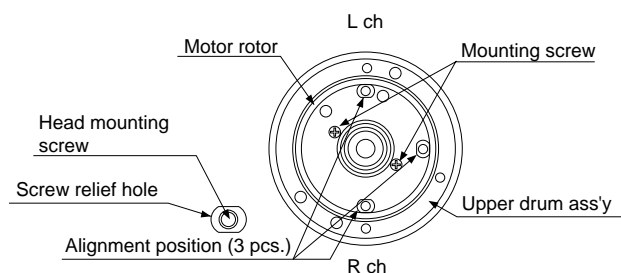
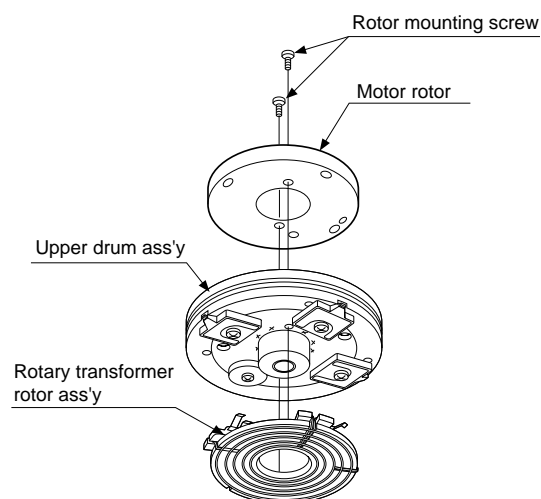


Figure 8



- (3) Lower drum ass'y
Tighten the FPC mounting screw to the lower drum ass'y. The screw tightening torque must be 0.08N·m (tighting torque 0.8kg·cm). (Figure 6)
- (4) Upper drum ass'y
After fitting the gap shim which was removed when the upper drum ass'y was dismantled to the shaft of lower drum ass'y, fit the upper drum ass'y. (Figure 3)
At this time slightly turn the upper drum ass'y by hand to ascertain that RTr does not scrape. If scrape is found, replace the gap shim with the gap shim packaged together with the replacement upper drum ass'y.
- (5) Drum motor stator
Fit the motor stator to the shaft. Then, apply the preliminary pressure 0.07N·m (0.7kg) to the motor stator, tighten the stator mounting screw. The tightening torque must be 0.15N·m (1.5kg·cm).
Install the stator so that the chassis line is nearly parallel with the motor stator straight section when it is installed on the chassis. (Figure 9)
- (6) Drum base
Align the positioning pin, and tighten the screws (3 pcs.).
- (7) Drum ass'y
Install the drum ass'y on the main chassis, and tighten the screws (3 pcs.).
- (8) Tape guide
Align the positioning pin, and tighten the screw (one pc.).

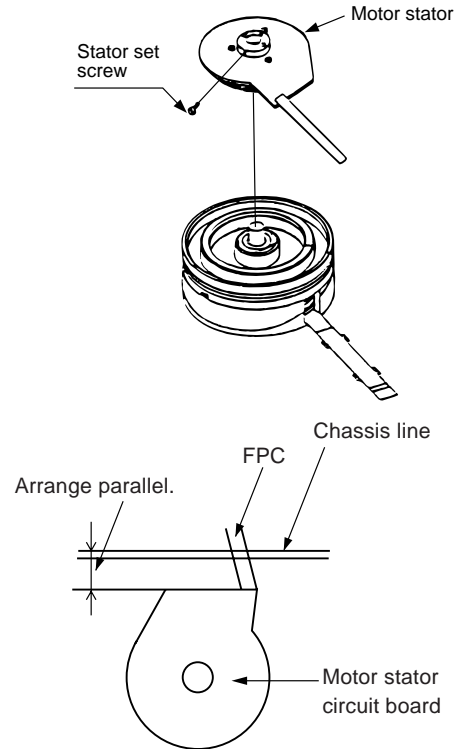
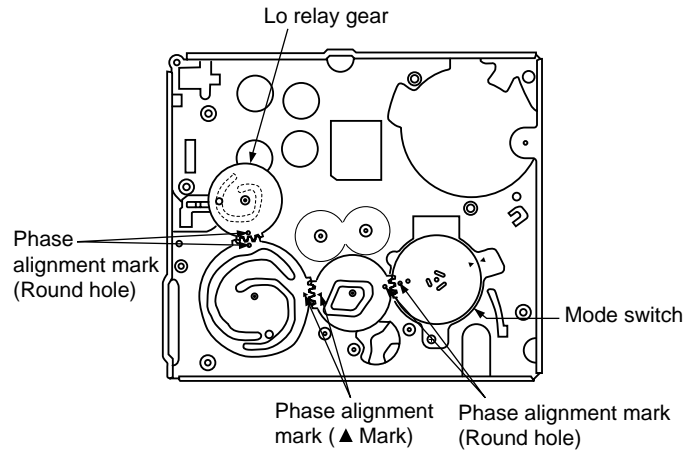


Figure 9

5-5-5. Phase matching

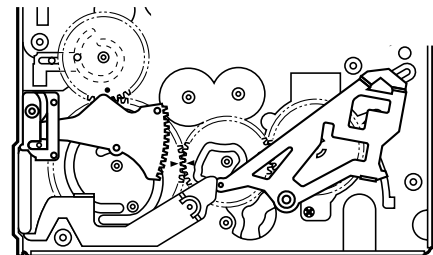
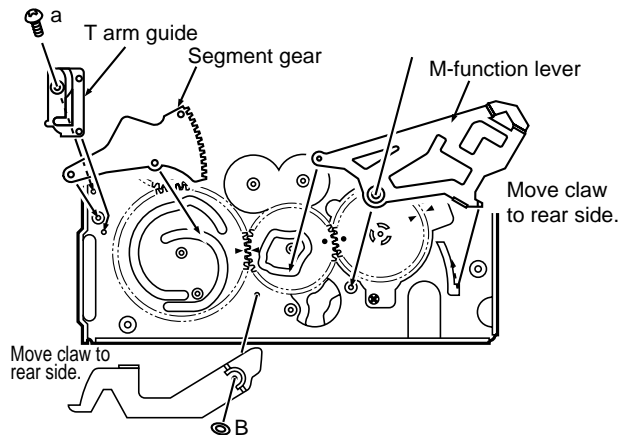
The phase of the following parts must be matched as shown in the figure below.
(Ascertain that the ▲ marks and round holes align.)

- (1) Lo relay gear (2) Main cam
- (3) Sub-cam (4) Mode switch



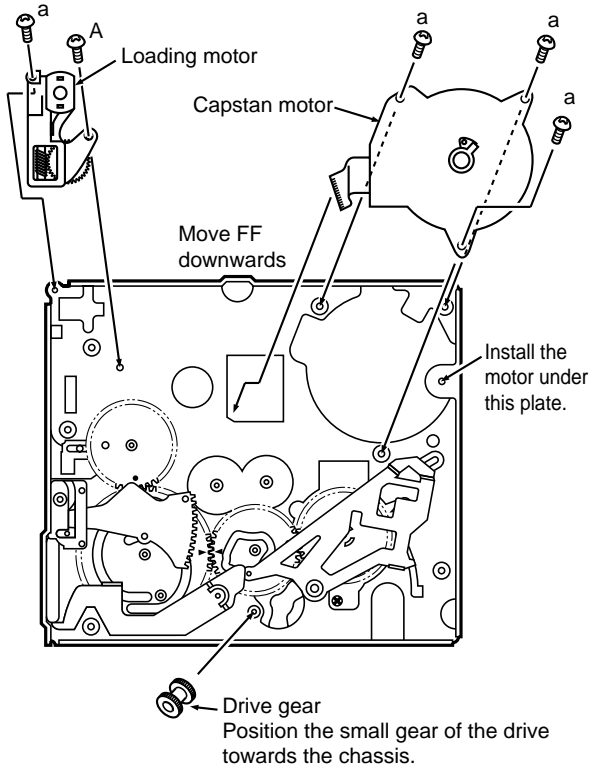
5-6. MECHANISM ASSEMBLING METHOD

- (1) Adjust the phase of each part.
- (2) Install screws and washers.
- (3) Install the segment gear, T arm guide and the M-function lever. Install the eject lever.



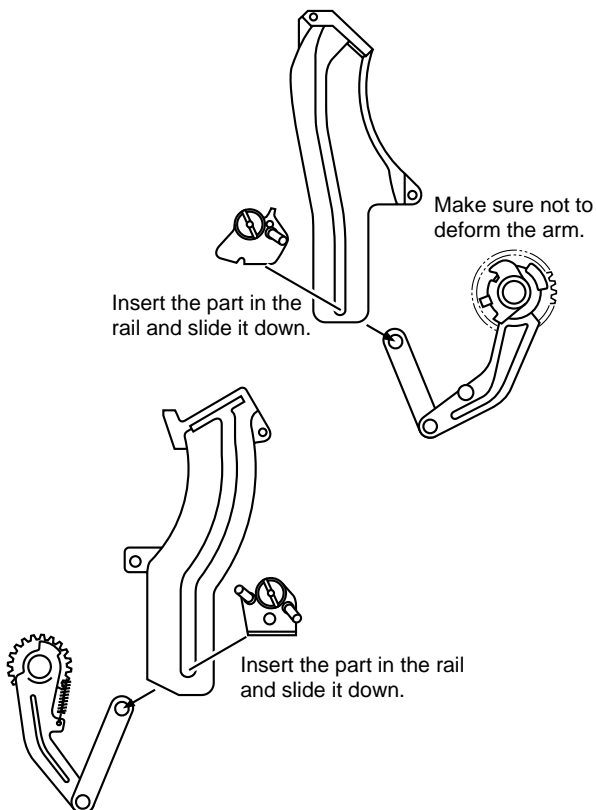
	Item	Tightening torque	Quantity
a	S Tight M1.4 x 3	70mN·m (0.7kgf·cm)	1
B	ø0.8-ø3-t0.2	—	1

- (4) Install the loading block assembly and the capstan motor.
(5) Install the drive gear. At this time, pay attention to the direction of gear. (The small gear must be located in the chassis side.)

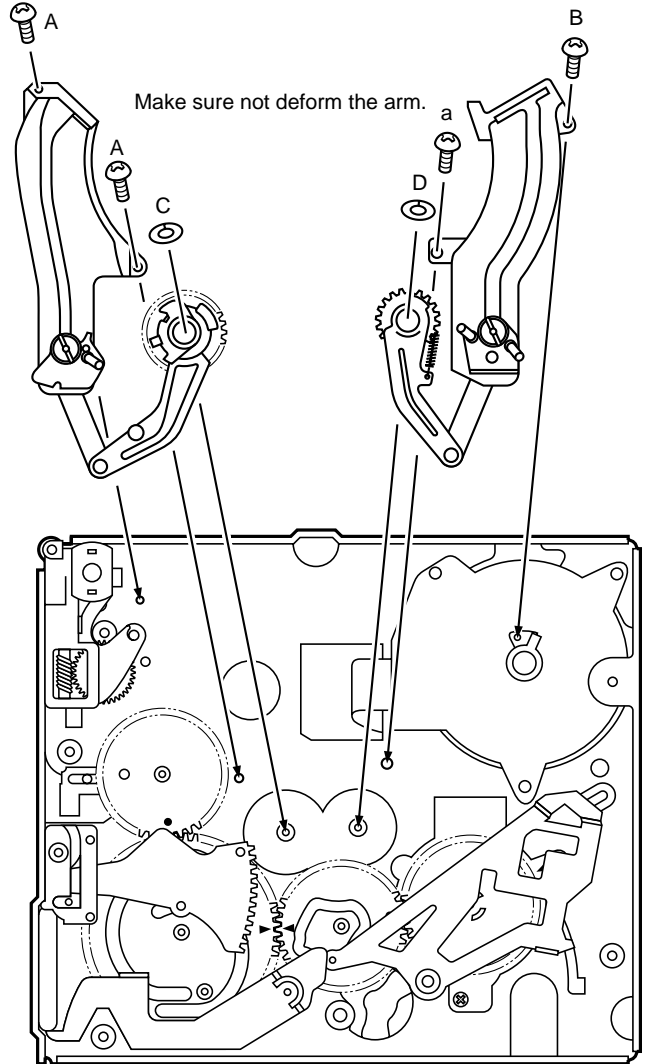


	Item	Tightening torque	Quantity
A	S Tight M1.4 x 2.5	70mN·m	1
a	S Tight M1.4 x 3	70mN·m	4

- (6) Install the guide rail assembly.

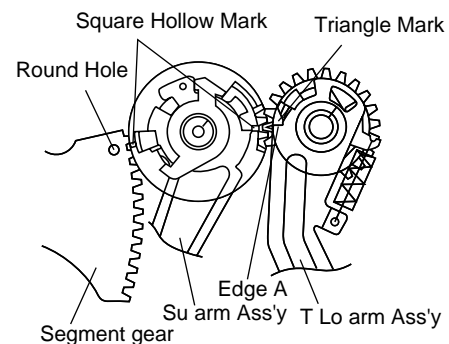


- (7) Install the guide rail assembly taking care to position it correctly.

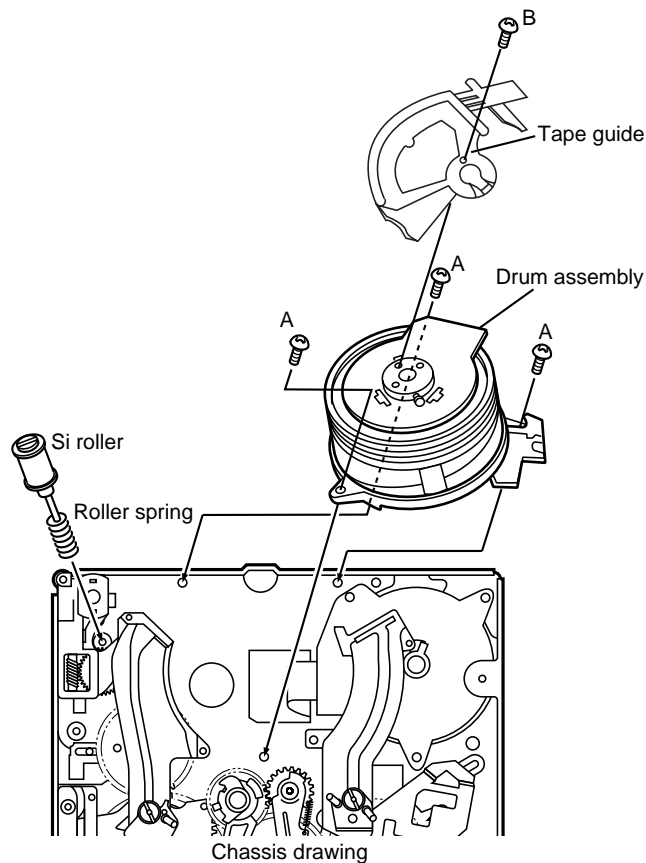


	Item	Tightening torque	Quantity
A	S Tight M1.4 x 2.5	70mN·m	2
B	S Tight M1.4 x 4	40mN·m	1
C	ø0.8-ø3-t0.2	—	1
D	ø2.1-ø5-t0.25	—	1
a	S Tight M1.4 x 3	70mN·m	1

Align the marks on the parts.

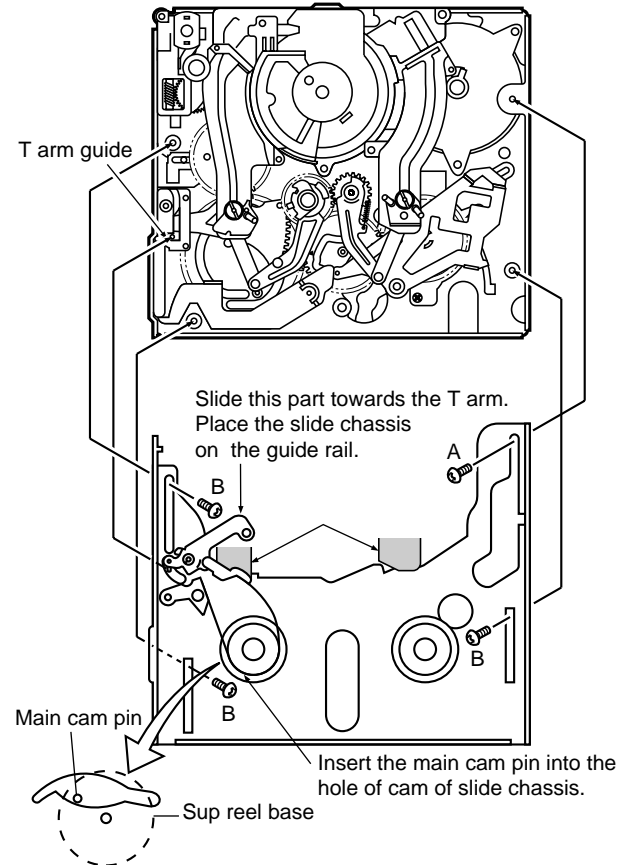


- (8) Install the drum assembly in the chassis.
(9) Install the tape guide in the drum assembly.
(10) Install the Si roller.



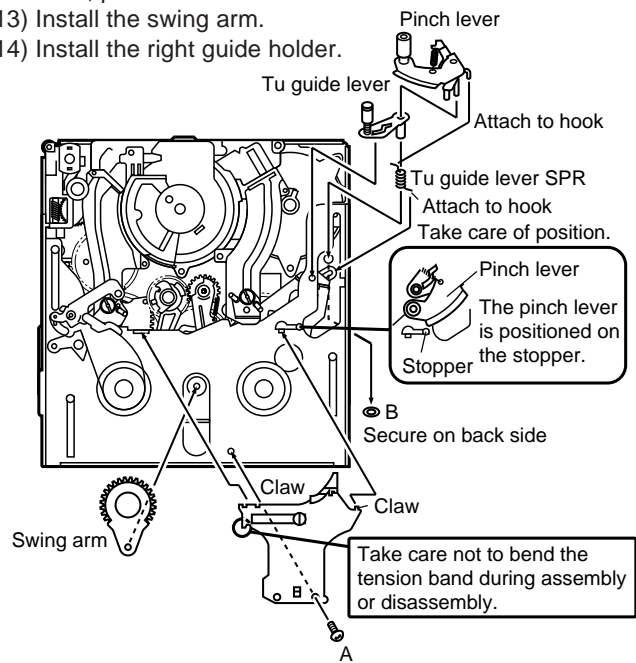
	Item	Tightening torque	Quantity
A	S tight M1.7 x L5.3	100mN·m	3
B	S tight M1.7 x L2.5	60mN·m	1

- (11) Install the slide chassis.



	Item	Tightening torque	Quantity
A	M1.4 x 1.5 ø4	40mN·m	1
B	M1.4 x 1.5 ø3.5	40mN·m	3

- (12) Install in the following order: T guide lever spring, T guide lever, pinch lever.
(13) Install the swing arm.
(14) Install the right guide holder.



	Item	Tightening torque	Quantity
A	S tight M1.4 x 2.5	70mN·m	1
B	CW ø0.8-ø3-t0.2	70mN·m	1

6. ADJUSTMENT OF VCR AND CAMERA

6-1. INITIAL SETTING OF E²PROM IC

6-1-1. E²PROM data alterable ways

- 1) Set the switch of main body to CAM, and use the remote control (RRMCG0033TASA) for adjustment to turn on the adjustment mode.
- 2) VCR adjustment address setting.
V ADJ
0000 "0000" is blinking
After an objective address was established, play key is pushed and set.
In addition, numerical change uses a "REW" or "FF" key.
- 3) VCR adjustment data setting.
V ADJ
0000 ## Value of "##" differs by an address.
After an objective data was established, "PLAY" key is pushed and set.
- 4) When data of other address are changed successively, push "STOP" key, and please repeat operation to 5) from 3).
- 5) When SW of the substance is turned into off, data are written to E²PROM from systematic microcomputer.

6-1-2. IC703 (E²PROM)

When the IC703 has been replaced, make the following settings and adjustments.

1. Remove the backup battery (CR2025).
2. Turn power switch to CAMERA.
3. Setting up the V ADJ mode as follows.
* After press the CONTINUE key, press the VCR ADJ key on service remote control (RRMCG0033TASA).
4. After setting the above data, clear the V ADJ mode and turn off the power by pull out the battery pack or DC cable.
Neglect about 30 seconds after turned of power, because data of address becomes effective after microcomputer is reset.
Now the setting of data is completion.

	H870U	H875U	H890U
address	data	data	data
03 (Specifacaton code)	48	4F	4A
02 (Country code)	01	01	01

Adjustments to follow

Make the system controller servo, VCR, and LCD adjustments according to their respective instructions.

6-1-3. Camera adjustment

When the IC2 has been replaced, make the camera adjustment according to its instructions.

All the camera adjustment data are written in the E²PROM provided on the lens unit. Therefore, when the lens is replaced, the camera must be adjusted again according to the camera adjusting procedure.

6-2. ADJUSTING THE Y/C, AUDIO AND LCD CIRCUITS ON MODELS WITHOUT A/V IN MODE (A/V IN MODE SET-UP PRODUCE)

- 1) Set the switch of main body to CAM, and use the remote control (RRMCG0033TASA) for adjustment to turn on the adjustment mode.
- 2) Set up the adjustment address (example : EE mode adjustment address 14). Once this address has been set up, the A/V IN mode (test mode) is automatically brought and the images appear on the LCD display.
- 3) Now make the adjustments referring to the instructions in the manual.

6-3. ADJUSTMENT OF VCR SECTION

6-3-1. Before starting the electric circuit adjustment

- Electric circuit adjustment becomes necessary, in most cases, when any of the wear mechanical parts or the video head has been replaced. Before starting the electric circuit adjustment, be sure to check that the mechanical parts work well (i.e., the mechanical parts have all been perfectly adjusted). In case a trouble or troubles are found in the electric circuitry, be sure to pinpoint the cause(s) by using the measuring instruments described below. After locating the trouble spot(s), then proceed to repair, replacement or adjustment. Do not change the positions of the controls when adequate measuring instruments are not available.
- In order to implement a higher-density, smaller machine, most of the electric circuit parts used on the Circuit Boards are of small-sized, surface-mounted type. For replacing part(s) as after-sales service, work with a soldering iron as speedily as possible. The heat resistance of the surface-mounted components is poor, when compared with the larger-sized discrete parts used for television sets and stationary decks, owing to their small sizes. Therefore, exercise due care to avoid long-time exposure of the pins of these parts to the heat of the soldering iron which may possibly damage them. Such care should be exercised especially for chip-layer capacitor replacement. It is advisable to use a temperature-controlled ceramic soldering iron (temperature at the tip: 250°C, contacting time: less than 5 seconds).

• Types of test modes

TEST No.	Title	Contents	Sensor on/off
1	Sensors off	All sensors but the cassette controller switch, dew sensor and battery sensor stay off.	
3	Automatic battery sensor adjustment	Battery sensor's input voltage put in memory.	
4	Battery adjustment error display	Battery sensor's adjustment errors are displayed at the right of the "past errors" area.	All sensors on All but sensors on
5	PASS mode	Track shift mode (1/4 shift)	All sensors on
6	Camera adjustment mode	Camera adjustment mode	[VCR interrupted]
7	VCR adjustment mode	VCR adjustment mode	
8	Automatic switching point adjustment (STOP ADJ)	Play standard tape and call this mode. Switching point is automatically adjusted.	

- ① When the battery adjustment mode is selected from the camera adjustment mode with a cassette with the erase protection tab, the VCR is automatically put in the REC mode.

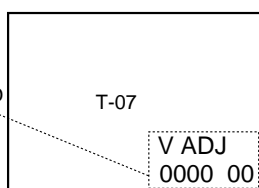
• Below discussed are these seven test modes.

- ① [TEST No. 1] Sensors off mode
All the sensors, except for the cassette controller switch, dew sensor and battery sensor, stay off. This enables to bring the VCR in the loading mode without tape. The VCR/camera performance can now be checked with no tape inside.
- ② [TEST No. 3] Automatic battery alarm adjustment
Used to automatically adjust the voltage level which makes the "battery" appear on the LCD display.
- ③ [TEST No. 4] Battery alarm check/error display
 - The difference between the preset battery alarm voltage and the current supply voltage is displayed as follows.
 - A past error is displayed at the right of the current battery alarm error.
- ④ [TEST No. 5] PASS mode
Used to adjust the tape travelling condition. The tracking is shifted by 1/4 from the center to make the tape running-related RF envelope fluctuations easier to observe.
- ⑤ [TEST No. 6] Camera adjustment mode
Used to adjust the camera section. (For details, see Servicing the Camera Section.)
- ⑥ [TEST No. 7] VCR adjustment mode
Used to adjust the VCR section. (For details, see Servicing the VCR Section.)
- ⑦ [TEST No. 8] Automatic switching point adjustment
Used to automatically adjust the playback switching point. (For details, see Automatic Adjustment of the Playback Switching Point.)

6-3-2-2. Setting up the VCR section adjustment mode (camera section adjustment)

- Select adjustment items by using addresses. Rewrite the adjustment data to change the settings.
Below shown the adjustment procedures and on-screen display.

Enlarged view
(CAM ADJ) camera
V ADJ ← VCR, LCD
0000 00
(Address) (Data)



	Procedural steps	Display (: flashing)
①	Turn up or down the flashing hexadecimal number with the FF or REW key to select the address of a desired adjustment item. (Initial address: 00H) Note: The addresses change as follows. 01FE — 01FF — 0000 — 0001 — 0002	V ADJ
②	Press the PB key to read the data of the selected address.	V ADJ 002C A3
③	Turn up or down the data setting with the FF or REW key. The data display starts flashing.	V ADJ 002C
④	Press the PB key again to write the data setting into the selected address.	V ADJ 002C 72
⑤	Press the STOP key in the above step ② or ④, and the screen returns back to the step ①.	V ADJ

When the FF or REW key is held down for 0.3 second or longer, the address selection is repeated in cycles of 100 msec. The data setting changes by ± 4 by holding the key down for 2 seconds or longer.

6-3-2-3. Battery shut-off voltage adjusting method

- 1) Supply power to the main unit, using the variable-voltage DC power supply (range of 2.5V to 5V).
- 2) Set the CAM/OFF/VCR SW to CAM to switch to the camera mode.
- 3) Load a recordable tape and set the main unit to CAM REC. PAUSE.
- 4) Set the main unit to TEST mode No. 3, and start recording.
- 5) Measure voltage between TL901(+) and TL903(GND), and adjust the supply voltage to 3V.
- 6) The adjustment is complete if "BATTERY" is displayed on the monitor screen for a second when the PLAY key of operation unit is pressed.
- 7) The adjustment is regarded as proper if the auto shut-off is actuated after the warning is displayed when the TEST mode is cancelled.

* In case of automatic adjustment of shut-off voltage, adjustment is impossible if voltage is above $3V \pm 0.2V$.
If the adjustment is made at 2.9V or below, the low-voltage operation may become unstable.

•Type of test modes

<Procedures>

To adjust the camera section of this machine, the remote control for servicing (RRMCG0033TASA) is used.
Press the "CONTINUE" key → "TEST SEL", this will show [T-01] on the LCD OSD, (01:flashing), and select the below TEST No. with "FF" or :REW" key and set with "PLAY" key.
Same procedures of adjustment from now on.

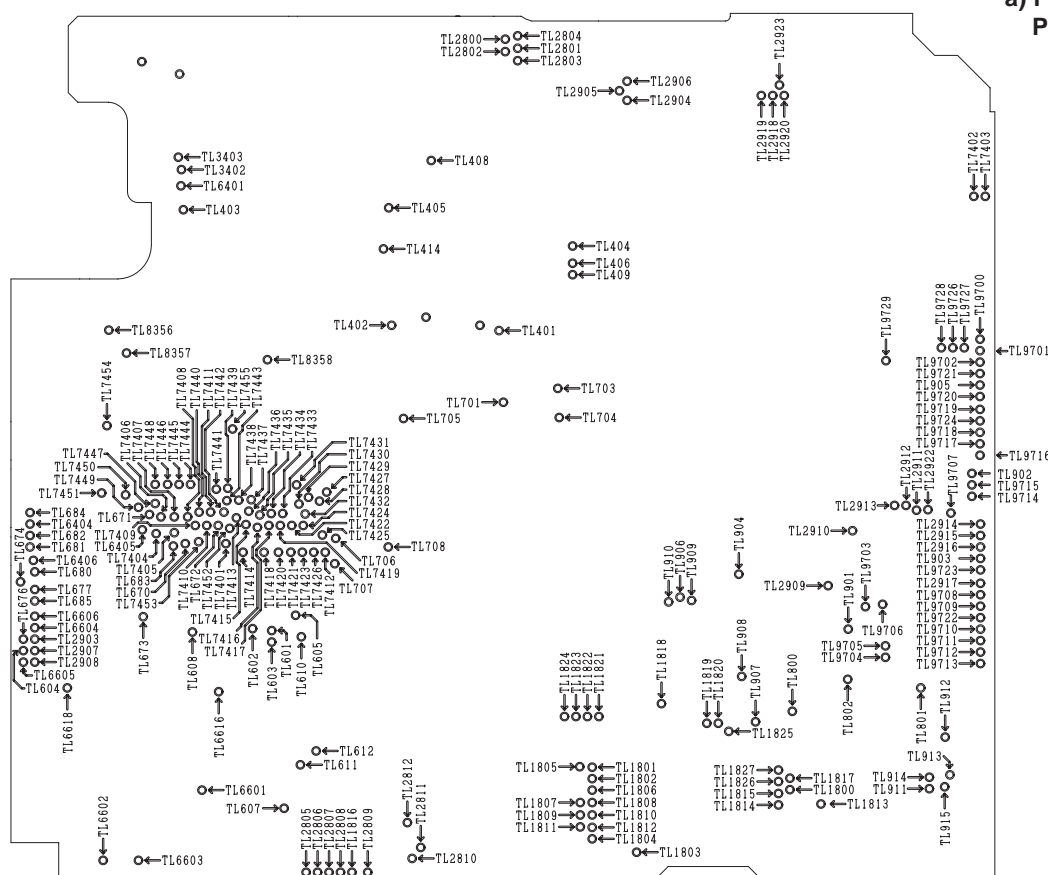
Use the SW2 thru SW9 switches on the adjustment tool to select the following test modes.

TEST No.	Title	Contents	Sensor on/off
1	Sensors off	All sensors but the cassette controller switch, dew sensor and battery sensor stay off.	
2	Mechanism adjustment mode	① Automatic SP/LP detection prohibited ② Different-mode detection prohibited ③ ATF sampling limited to center	All sensors on
3	Automatic battery sensor adjustment	Battery sensor's input voltage put in memory.	
4	Error display Battery adjustment error display	Past errors appear on the counter display of the viewfinder. Battery sensor's adjustment errors are displayed at the right of the "past errors" area.	All sensors on All but sensors on
5	PASS mode	Track shift mode (1/4 shift)	All sensors on
6	Camera adjustment mode	Camera adjustment mode	[VCR interrupted]
7	VCR adjustment mode	VCR adjustment mode	
8	Automatic switching point adjustment (STOP ADJ)	Play standard tape and call this mode. Switching point is automatically adjusted.	

- ① When the battery adjustment mode is selected from the camera adjustment mode with a cassette with the erase protection tab, the VCR is automatically put in the REC mode.

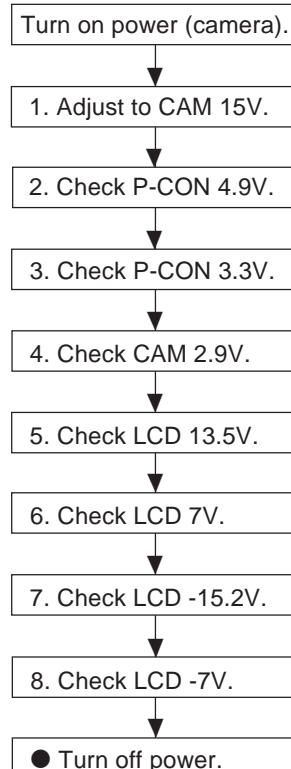
6-3-3. Adjusting the VCR circuit

- Test Points on the Video Circuit Board



6-3-3-1. Adjusting the power circuit

a) POWER CIRCUIT ADJUSTMENT PROCEDURE



POWER CIRCUIT ADJUSTMENT METHOD

- Input 9V from DC Jack, and set the power switch to the camera side.
- ✱ Don't fail to fix the back light unit before adjusting them.

1. Adjustment to CAM 15V

Make an adjustment so that the digital voltmeter indicates $15V \pm 0.05V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL905
Adjustment address	3EH
Standard	$15V \pm 0.05V$

2. Checking of P-CON 4.9V

Check that the digital voltmeter indicates $4.9V \pm 0.1V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL901
Adjustment address	
Standard	$4.9V \pm 0.1V$

3. Checking of P-CON 3.3V

Ascertain that the digital voltmeter indicates $3.3V \pm 0.1V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL903
Adjustment address	
Standard	$3.3V \pm 0.1V$

4. Checking of CAM 2.9V

Ascertain that the digital voltmeter indicates $2.9V \pm 0.1V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL910
Adjustment address	
Standard	$2.9V \pm 0.1V$

5. Checking of LCD 13.5V

Ascertain that the digital voltmeter indicates $13.5V \pm 0.2V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL907
Adjustment address	
Standard	$13.5V \pm 0.2V$

6. Checking of LCD 7V

Ascertain that the digital voltmeter indicates $7V + 0.4/-0.2V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL904
Adjustment address	
Standard	$7V + 0.4/-0.2V$

7. Checking of LCD -15.2V

Ascertain that the digital voltmeter indicates $-15.2V \pm 1V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL906
Adjustment address	
Standard	$-15.2V \pm 1V$

8. Checking of LCD -7V

Ascertain that the digital voltmeter indicates $-7V + 0.4/-0.7V$.

Measuring instrument	Digital voltmeter
Measuring terminal	TL908
Adjustment address	
Standard	$-7V + 0.4/-0.7V$

- Turn off power supply.

6-3-4. Adjustment of system controller and servo circuit

6-3-4-1. Adjustment of playback switching point

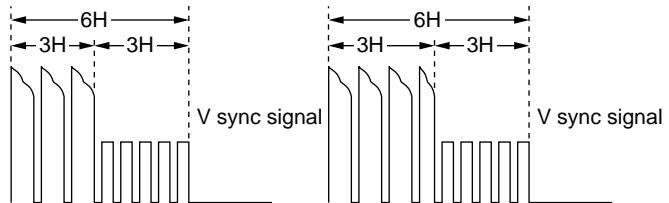
b) CHARGING CIRCUIT ADJUSTMENT PROCEDURE

- 1) Play back the alignment tape (JiGWR5-5NSP)
- 2) Press the “CONTINUOUS PUSH” and “TEST MODE SELECTION” of adjustment remote controller to set the test mode.
(At this time the numeral of “TEST01” blinks.)
- 3) Using the “FF” and “REW” keys, select “TEST08”, and press the playback key to set the SW-P adjustment mode.
- 4) After a while the adjustment is completed, and operation stops automatically.
In case of adjustment failure the tape is ejected automatically.

Measuring instrument	Oscilloscope
Mode	Playback
Adjustment address	30h
Tape	Alignment tape (JiGWR5-5NSP)

Only in the case when the satisfactory result was not obtained by the adjusting method described above, perform the following adjustment.

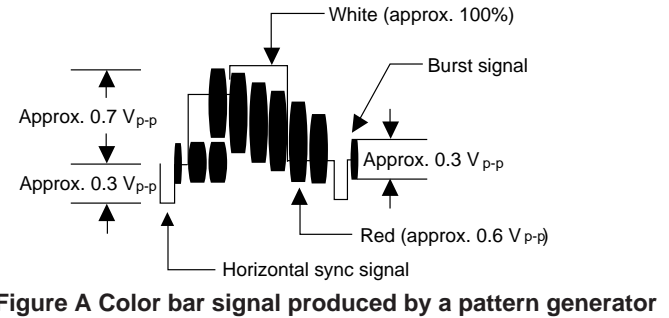
- 1) Connect each signal to the oscilloscope.
1ch: Video output TL3402
2ch: H-SW-P TL404
GND: GND TL7449
- 2) Play back the alignment tape (JiGWR5-5NSP)
- 3) Press the “CONTINUOUS PUSH” and “VCR ADJUSTMENT” of adjustment remote controller to set the VCR adjustment mode.
- 4) Select the address 30h, set the sync slope of oscilloscope to (–), adjust the data with “REW” and “FF” so that the interval between the trigger point and the V sync signal is set to 6H, and fix the data with the “PLAY” button. (See Figure 6.1.1.)
- 5) Then, set the sync slope to (+), and ascertain that the interval between the trigger point and the V sync signal has been set to 6H. (See Figure 6.1.2.)
- 6) Keep the STOP key pressed for about 3 seconds to exit from the adjustment mode.



6-3-5. Y/C circuit adjustment method

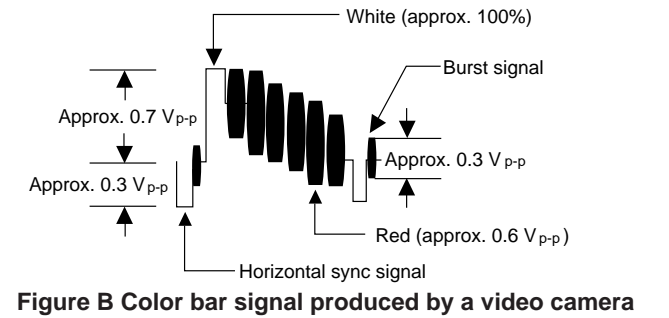
Input signal conditions

Video signals generated by a pattern generator are used to make electric adjustments in a Y/C circuit. Thus this signal must conform to the standards prescribed for adjustment signals.
Use an oscilloscope to check that the video signal is terminated with a 75 Ω resistor, the amplitude of the sync signal component, video component and burst signal are approx. 0.3 Vp-p, 0.7 Vp-p and 0.3 Vp-p, respectively and that they are flat. The relative level of the burst signal and the red signal shall be 0.30:0.66.
The color bar used in an electrical adjustment is shown in Figure A.



* When a pattern generator is not used

Shoot a color bar chart (JiGCHART-4) using a perfectly adjusted video camera.
A signal from a perfectly adjusted video camera shooting a color bar chart (JiGCHART-4) can be used as an adjusting signal if the lighting can be set to meet the following conditions: output (75 Ω terminated), the amplitude of the sync signal component, video component and burst signal are approx. 0.3 Vp-p, 0.7 Vp-p and 0.3 Vp-p, respectively. The relative level of the burst signal and the red signal shall be 0.30:0.66. This is shown in Figure B.



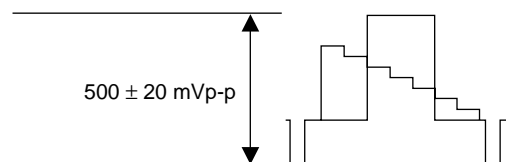
1. Adjustment of fixed data writing

ADD	67	68	69	6A	6B	6C	6D	6E	6F	55	66	54	65	5C	64
DATA	01	00	02	01	FA	00	00	66	11	FE	FE	FE	FE	70	C0

Before starting Y/C adjustment, be sure to write the specific data in the addresses listed left.
If the data listed left is written after Y/C adjustment, adjusting values may deviate.

2. Adjustment of EE Y level

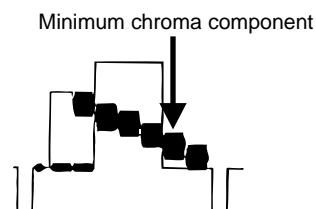
Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL3402, TL8356 (GND)
Adjustment address	32
Adjustment level	500 ± 20 mVp-p



- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 32.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so as to get 500 mVp-p between SYNC TIP and WHITE PEAK on TL3402.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 32.

3. Adjustment of comb filter

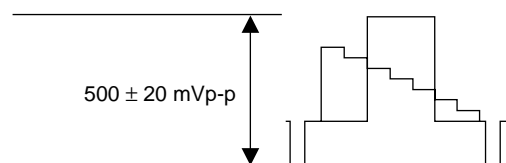
Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL414, TL8356 (GND)
Adjustment address	Phase: 36, Gain: 37
Adjustment level	Minimum chroma component



- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 36.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so as to minimize the chroma component on TL414.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 36.
- (4) Enter the VCR adjustment mode with an adjustment remote control, and select the address 37.
Select the address, using the FF or REW key, and fix it with the PB key.
- (5) Make an adjustment so as to minimize the chroma component on TL414.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 37.
- (6) Repeat the steps (2) - (3).

4. Adjustment of Y emphasis level

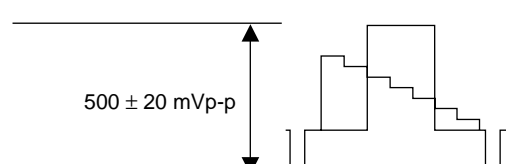
Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL408, TL8356(GND)
Adjustment address	56
Adjustment level	500 ± 20 mVp-p



- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 56.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so as to get 500mVp-p between SYNC TIP and WHITE PEAK on TL408.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 56.

5. Adjustment of Y de-emphasis (Hi-8)

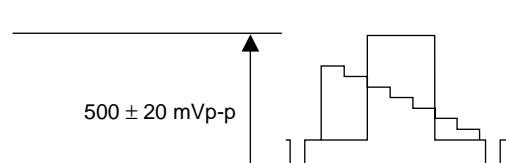
Measuring instrument	Oscilloscope
Mode	PB
Input signal	Color bar (JiGWR5-8NSE)
Measuring point	TL405, TL8356(GND)
Adjustment address	57
Adjustment level	500 ± 20 mVp-p



- (1) Set the color bar tape for alignment (JiGWR5-8NSE).
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 57.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so as to get 500mVp-p between SYNC TIP and WHITE PEAK on TL405
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 57.

6. Adjustment of Y de-emphasis (Normal-8)

Measuring instrument	Oscilloscope
Mode	PB
Input signal	Color bar (JiGWR5-5NSP)
Measuring point	TL405, TL8356(GND)
Adjustment address	62
Adjustment level	500 ± 20 mVp-p

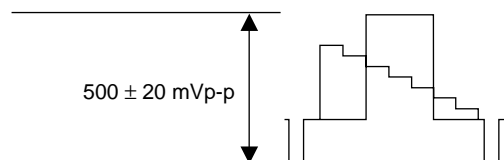


- (1) Set the color bar tape for alignment (JiGWR5-5NSP).
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 62.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so as to get 500mVp-p between SYNC TIP and WHITE PEAK on TL405.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 62.

7. Adjustment of PB Y level

Measuring instrument	Oscilloscope
Mode	PB
Input signal	Color bar (JiGWR5-8NSE)
Measuring point	TL3402, TL8356(GND)
Adjustment address	3F
Adjustment level	500 ± 20 mVp-p

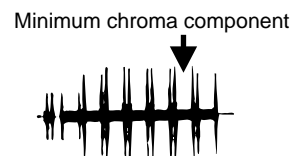
- (1) Set the color bar tape for alignment (JiGWR5-8NSE).
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 3F.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so as to get 500mVp-p between SYNC TIP and WHITE PEAK on TL3402.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 3F.



8. Adjustment of chroma emphasis f0

Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL409, TL8356 (GND)
Adjustment address	38
Adjustment level	Minimum chroma component

- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 38.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so as to get minimum chroma component on TL409.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 38.



9. Adjustment of Y-FM carrier (Hi-8)

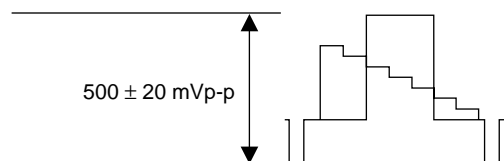
Measuring instrument	Frequensy counter
Mode	VCR STOP
Input signal	No input
Measuring point	TL7443
Adjustment address	33
Adjustment level	5.99 ± 0.02 kHz

- (1) Input the no-signal into the video input/output terminal in the VCR STOP mode.
At this time, do not pull out the jack on the Viewcam side.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 33.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so that the frequency counter indicates 5.99MHz on TL7443.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 33.

10. Adjustment of Y-FM deviation (Hi-8)

Measuring instrument	Oscilloscope
Mode	RWC/PB (self-playback/recording)
Input signal	Color bar
Measuring point	TL3402
Adjustment address	34
Adjustment level	500 ± 20 mVp-p

- (1) Set the recordable tape.
- (2) Before entering the adjustment mode, make self-playback/recording of color bar with an external output.
Measure whether the playback output at this time is 500 mVp-p on TL3402 (Hi8 TAPE).
- (3) Enter the VCR adjustment mode with an adjustment remote control, and select the address 34.
Select the address, using the FF or REW key, and fix it with the PB key.
- (4) When decreasing by 10 mVp-p as compared to the measurement value of (2), decrease the data of address 34 by about 5 (digit).
(Reference)
When increasing by 10 mVp-p as compared to the measurement value of (2), increase the data of address 34 by about 5 (digit).
(Reference)
Select the address, using the FF or REW key, and fix it with the PB key.
- (5) Release the adjustment mode, and make self-playback/recording again. When the measuring value at this time is in the standard value, the adjustment is completed. If it is not in the standard value, repeat the steps (2) -(4).
- (6) After completing the adjustment of (5), check the adjusting value of Y-FM carrier f0 (5.99 MHz in no input).
When the measuring value exceeds the standard value of carrier f0, make an adjustment of Y-FM carrier f0 again.



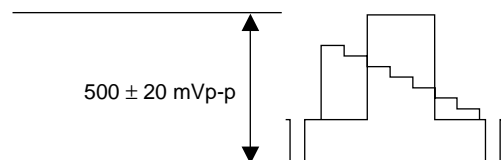
11. Adjustment of Y-FM carrier f0 (Normal-8)

Measuring instrument	Ferquensy counter
Mode	VCR STOP
Input signal	No input
Measuring point	TL7443
Adjustment address	60
Adjustment level	4.38 ± 0.02 MHz

- (1) Input the no-signal into the video input/output terminal in the VCR STOP mode.
At this time, do not pull out the jack on the Viewcam side.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 60.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so that the frequency counter indicates 4.38 MHz on TL7443.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 60.

12. Adjustment of Y-FM deviation (Normal-8)

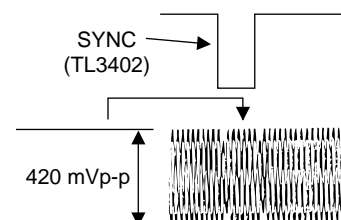
Measuring instrument	Oscilloscope
Mode	REC/PB (self-playback/recording)
Input signal	Color bar
Measuring point	TL3402
Adjustment address	61
Adjustment level	500 ± 20 mVp-p



- (1) Set the recordable tape.
- (2) Before entering the adjustment mode, make self-playback/recording of color bar with an external output. Measure whether the playback output at this time is 500 mVp-p on TL3402 (STANDARD TAPE).
- (3) Enter the VCR adjustment mode with an adjustment remote control, and select the address 61. Select the address, using the FF or REW key, and fix it with the PB key.
- (4) When decreasing by 10 mVp-p as compared to the measurement value of (2), decrease the data of address 61 by about 5 (digit).
(Reference)
When increasing by 10 mVp-p as compared to the measurement value of (2), increase the data of address 61 by about 5 (digit).
(Reference)
Select the address, using the FF or REW key, and fix it with the PB key.
- (5) Release the adjustment mode, and make self-playback/recording again. When the measuring value at this time is in the standard value, the adjustment is completed. If it is not in the standard value, repeat the steps (2) -(4).
- (6) After completing the adjustment of (5), check the adjusting value of Y-FM carrier f_0 (4.38 MHz in no input).
When the measuring value exceeds the standard value of carrier f_0 , make an adjustment of Y-FM carrier f_0 again.

13. Adjustment of REC-Y equalizer (Hi-8 ME)

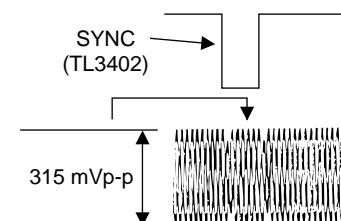
Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL7443
Adjustment address	58
Adjustment level	420 ± 20 mVp-p



- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 58. Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so that the SYNC TIP portion gets 420 mVp-p on TL7443. Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 58.

14. Adjustment of REC-Y equalizer (Hi-8 MP)

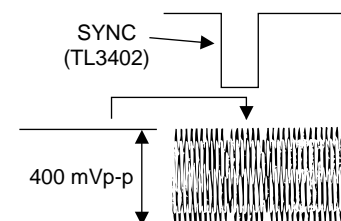
Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL7443
Adjustment address	31
Adjustment level	315 ± 20 mVp-p



- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 31. Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so that the SYNC TIP portion gets 315 mVp-p on TL7443. Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 31.

15. Adjustment of REC-Y equalizer (Normal-8 ME)

Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL7443
Adjustment address	63
Adjustment level	400 ± 20 mVp-p

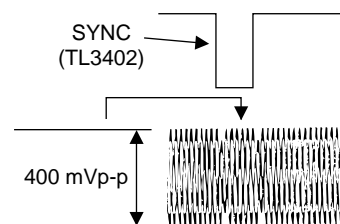


- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 63. Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so that the SYNC TIP portion gets 400 mVp-p on TL7443. Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 63.

16. Adjustment of REC-Y equalizer (Normal-8 MP)

Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL7443
Adjustment address	3A
Adjustment level	400 ± 20 mVp-p

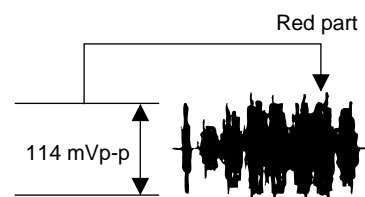
- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 3A.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so that the SYNC TIP portion gets 400 mVp-p on TL7443.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 3A.



17. Adjustment of REC-C equalizer

Measuring instrument	Oscilloscope
Mode	VCR STOP
Input signal	Color bar
Measuring point	TL7441
Adjustment address	59
Adjustment level	114 ± 10 mVp-p

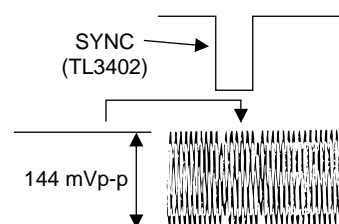
- (1) Input the color bar signal into the video input/output terminal in the VCR STOP mode.
- (2) Enter the VCR adjustment mode with an adjustment remote control, and select the address 59.
Select the address, using the FF or REW key, and fix it with the PB key.
- (3) Make an adjustment so that the SYNC TIP portion gets 114 mVp-p on TL7441.
Select the data, using the FF or REW key, and fix it with the PB key.
After the adjustment, press the STOP key, and exit from the adjustment address 59.



18. Adjustment of Y recording current

Measuring instrument	Oscilloscope
Mode	EE (VCR STOP)
Input signal (Tape)	Color bar
Test point	CH1; TL7410/TL7401 (GND) CH2; TL7409/TL7401 (GND)
Adjustment address	105
Adjustment level	144 ± 10 mVp-p

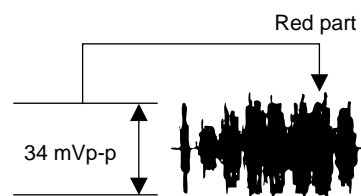
- (1) Connect TL7455 and TL 7453 with a proper short-jumper.
- (2) Select the address 105.
- (3) Set the oscilloscope.
 - ① Connect the SIG side of oscilloscope CH1 probe to the TL7410, the GND side to the TL7401.
 - ② Connect the SIG side of oscilloscope CH2 probe to the TL7409, the GND side to the TL7401.
 - ③ Using the oscilloscope, invert either CH1 or CH2 signal, and add two signals.
 - ④ At this time match the CH1 and CH2 volts levels.
- (4) Change the data value, and make an adjustment to get the specified value at SYNC position.



19. Adjustment of C recording current

Measuring instrument	Oscilloscope
Mode	EE (VCR STOP)
Input signal (Tape)	Color bar
Test point	CH1; TL7410/TL7401 (GND) CH2; TL7409/TL7401 (GND)
Adjustment address	104
Adjustment level	34 ± 2 mVp-p

- (1) Connect TL7454 and TL 7453 with a proper short-jumper.
- (2) Select the address 104.
- (3) Set the oscilloscope.
 - ① Connect the SIG side of oscilloscope CH1 probe to the TL7410, the GND side to the TL7401.
 - ② Connect the SIG side of oscilloscope CH2 probe to the TL7409, the GND side to the TL7401.
 - ③ Using the oscilloscope, invert either CH1 or CH2 signal, and add two signals.
 - ④ At this time match the CH1 and CH2 volts levels.
- (4) Change the data value, and make an adjustment to get the specified value at Red position.



6-3-6. Adjustment of audio circuit

Note: The data enclosed in the brackets [] are for the sub-channel.

1. Adjustment of filter f0

Measuring instrument	Oscilloscope
Mode	Playback
Input signal	—
Measuring terminal	TL605
Adjustment address	VCR ADJ 05F
Set value	—

- (1) Connect the oscilloscope to TL605.
- (2) Play back the stereo standard tape (JiGWR5-9NS), and adjust so that the waveform envelop of TL605 becomes as smooth as possible. Whenever the TELE. WIDE key of adjustment remote controller is pressed, waveform MAIN/SUB is switched. Select the point which gives the flattest possible envelope.

2. Playback level adjustment

Measuring instrument	Voltage mater
Mode	Playback
Input signal	—
Measuring terminal	TL608 [TL607]
Adjustment address	VCR ADJ 05E [05D]
Set value	-7.5 dBs ±0.5 dB

- (1) Before adjustment record the current data of adjustment address 05E and 05D.
- (2) Be sure to connect the voltage mater to TL608 [TL607].
- (3) Play back the stereo standard tape (JiGWR5-9NS), and adjust so as to get an indication -7.5 dBs ±0.5 dB.
- (4) Watching alternately TL608 and TL607, repeat adjustment of 05E and 05D.
- (5) If data differs significantly from the first record value, this implies adjustment failure.

6-3-7. Adjustment of LCD display circuit

Adjustment procedures and connections are the same as with the VCR section. (Refer to item 6-3-3)

1. LCD Data Setting

VCR ADJ	
Address	Data
4C	7A
4D	B5
4E	8A
4F	E5
50	64
51	A9
52	8A
53	E5
4B	20
3B	40

2. Touch Panel Data Setting

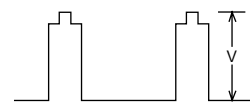
VCR ADJ	
Address	Data
EC	30
ED	2B
EE	BA
EF	AA
F0	0C

3. Inverter input Voltage Setting

VCR ADJ	
Address	Data
10	D9
11	3 type BD
	3.5 type C6
12	3 type 99
	3.5 type A3

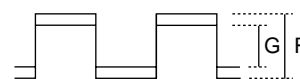
4. Contrast adjustment

Measuring point	TL1814 (G-OUT)
Address	40
Mode	VCR AV input
Adjusting method	<ol style="list-style-type: none"> 1) Set the data of address 47 at the address 80. 2) Input white 100% as an AV input. 3) Connect TL1804 to GND. (The 1H inversion stops.) 4) Connect 220 KΩ between TL802 and GND. 5) Seeing the waveform of TL1814 (G-OUT), make an adjustment between the white peak and the sync tip.
Adjustment standard	3.35V ± 0.1V
Remarks	_____



5. R-W/B adjustment

Measuring point	TL1814 (G-OUT) TL1813 (R-OUT)
Address	41
Mode	VCR AV input
Adjusting method	<ol style="list-style-type: none"> 1) AV input: Nonsignal. 2) TL1814 (G-OUT): Oscilloscope CH1 TL1813 (R-OUT): Oscilloscope CH2 3) Adjust P-P of TL1813 becomes bigger 0.15V than TL1814.
Adjustment standard	±0.1Vp-p
Remarks	_____



6. B-W/B adjustment

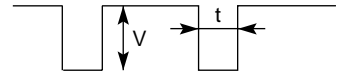
Measuring point	TL1814 (G-OUT) TL1815(B-OUT)
Address	42
Mode	VCR AV input
Adjusting method	<ol style="list-style-type: none"> 1) AV input: Nonsignal. 2) TL1814 (G-OUT): Oscilloscope CH1 3) TL1815 (B-OUT): Oscilloscope CH2 4) Adjust P-P of TL1815 become bigger 0.1V than TL1814.
Adjustment standard	±0.1Vp-p
Remarks	_____

7. VCO adjustment

Measuring point	TL1802
Address	43
Mode	VCR AV input
Adjusting method	1) AV input : NON Signal 2) Connect the frequency counter to TL1802, and adjust the frequency.
Adjustment standard	15.734kHz \pm 100Hz
Remarks	_____

8. H-position adjustment

Measuring point	TL1802
Address	44
Mode	VCR AV input
Adjusting method	1) Input the white 100% signal as an AV input. 2) Connect the oscilloscope to TL1802, and adjust the pulse width.
Adjustment standard	3 type 2.8 μ sec/3.5 type 3.74 μ sec \pm 0.15 μ sec
Remarks	_____



9. COMMON PULSE adjustment

Measuring point	TL1818
Address	22
Mode	VCR AV input
Adjusting method	1) Set the data of address 47 at the address 80. 2) Input the white 100% signal as an AV input. 3) Connect the oscilloscope to TL1818, and adjust the pulse width.
Adjustment standard	6.6Vp-p \pm 0.1Vp-p
Remarks	_____

10. COM-BIAS adjustment

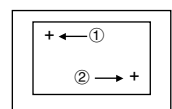
Measuring point	LCD panel display surface
Address	45
Mode	VCR AV input
Adjusting method	1) Input the white 40% signal as an AV input, and set data of address 47 at the address 80. 2) Set the illuminometer (TOPCON IM-3) on the LCD panel surface (do not allow entry of external light). 3) Connect the illuminometer to the oscilloscope. 4) Make an adjustment so as to minimize the ripple of output waveform. Response time: 0.6 sec 5) Adjust again if longitudinal stripe appears evidently. * Or set to the point where the black is settled deepest with the grey scale signal.
Adjustment standard	Minimum
Remarks	Make an adjustment after aging for 5 minutes or more.

11. W/B adjustment

Measuring point	LCD panel display surface
Address	41, 42
Mode	VCR AV input
Adjusting method	1) White fade signal input. 2) Adjust so as to get the same white screen as that of standard monitor. (Adjust again, visually checking as stated in item 2.3.)
Adjustment standard	Standard monitor
Remarks	Make an adjustment after aging for 5 minutes or more.

12. Touch panel position detection adjustment

Measuring point	LCD panel display area
Mode	VCR AV input
Adjusting method	1) Enter the adjustment of touch panel adjustment mode. (TEST mode OE) 2) Press successively the two-points OSD indication cross-shaped (+) one by one ① the left above → ② the right below (setting point) → ③ ④ (as you pleases). Set back the adjustment mode by fifth touch (⑤). Note: As touch the two-points indication (+), display the blue (① ②) → the purple (③ ④), the case color a light blue is the adjustment "OK" and the red is the adjustment "NG". The touch (③ ④) can check the adjustment with the tip of finger indiation.



6-4. ADJUSTMENT OF CAMERA SECTION

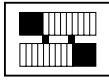

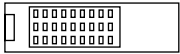
6-4-1. Servicing of camera section

(1) Object, measuring instrument and jigs necessary for camera section servicing

<ul style="list-style-type: none"> Gray scale chart Vectorscope Extension cable Oscilloscope Video output cable 	<ul style="list-style-type: none"> Color bar chart Color temperature conversion filter HOYA "LB-165" Digital voltmeter 	<ul style="list-style-type: none"> Halogen light (2 pcs.) Color video monitor AC adapter Service Remote Control
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Configuration

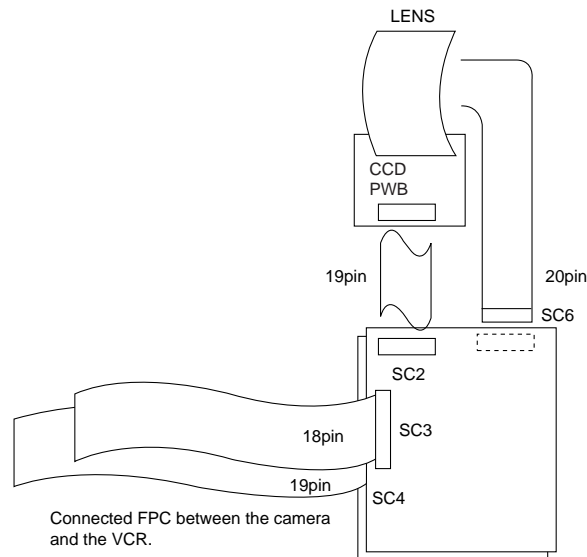
<Note: The entries of list> 1. Name 2. Part No. 3. Code

 <ol style="list-style-type: none"> Gray Scale Chart (390 x 520 mm) JiGCHART-1 CP 	 <ol style="list-style-type: none"> Color Bar Chart (240 x 320 mm) JiGCHART-4 DA 	<ol style="list-style-type: none"> Color Temperature Conversion Filter JiGHOYA-LB165 BN 	 <ol style="list-style-type: none"> Service Remote Control RRMCG0033TASA BT
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Note:

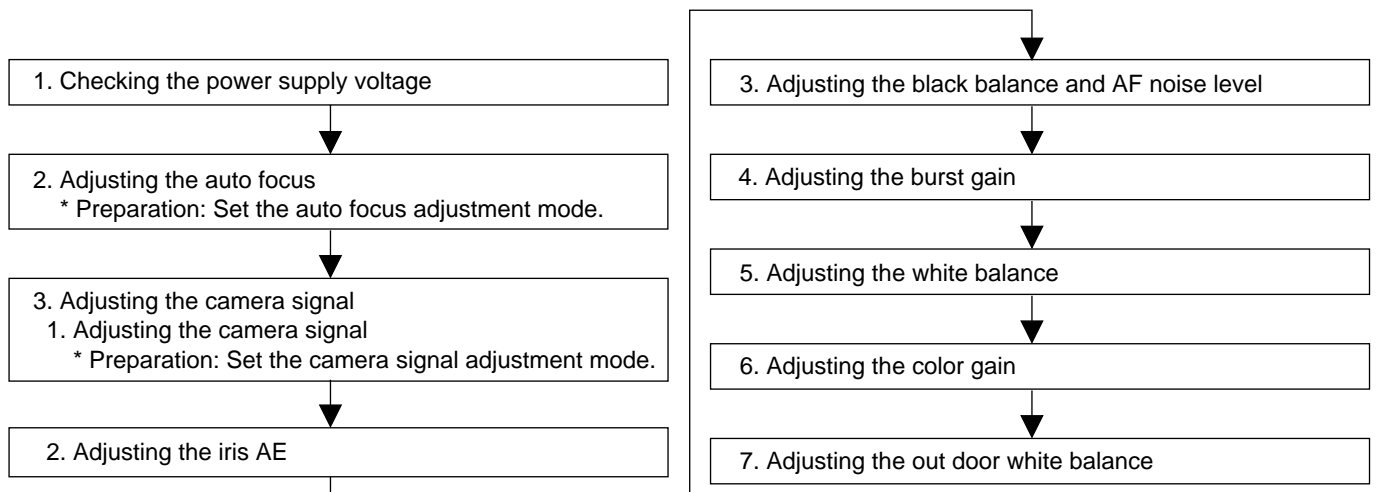
- Color temperature conversion filter (jig item No.3) may be obtained from HOYA Optics in your local market.
- N: Indicates the new jigs.

• Connections for Camera Section Servicing



6-4-2. Adjustment procedures

This adjusting procedure covers all the steps for conducting the adjustments all the way. There are some steps that may be skipped, depending on the specific needs for servicing and adjustment.



6-4-2-1. Checking the power supply voltage

- Measuring terminal: CAM 4.9V
CAM 2.8V
CAM 3.1V
CAM 15V
CAM -9V
LENS 5V
- Measuring instrument: Digital voltmeter

6-4-2-2. Auto focus adjustment

• Basic iris adjustment

Measuring instrument	None
Subject	—
Tape	—
Test point	None
Adjustment address	1FF
Adjustment level	09, 0A, 0B

DATA	Adjustment
09	Hall offset
0A	Iris offset
0B	Iris close

- Set up the auto focus adjustment mode. (Write 01 to the address 1FF)
- Write the adjustment data 09, 0A and 0B one after the other to the address 1FF, the adjustment are as above.

• Lens adjustment

Measuring instrument	None
Subject	More than 50 m away
Tape	—
Test point	None
Adjustment address	1FF
Adjustment level	11, 12, 06, 08, 0D

DATA	Adjustment
11	Voltage adjustment
12	Optical wide-end adjustment
06	Wide-end focus ∞ position adjustment
08	Tele-end focus ∞ position adjustment
0D	Zoom tracking adjustment

- Set up the auto focus adjustment mode.
(This is unnecessary after the above basic iris adjustment has been made.)
- Write the adjustment data 11, 12, 06, 08 and 0D one after the other to the address 1FF. The adjustments are as above.

Write FF to the address 1FE to exit the auto focus adjustment mode.

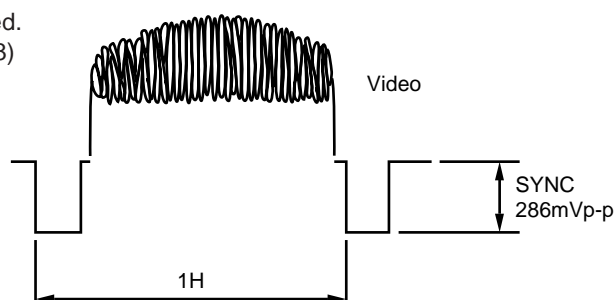
6-4-2-3. Adjustment of Camera signal

- Before starting these adjustment, auto focus adjustment must be finished.
- Set up the camera signal adjustment mode (Write 00 to the address 1F8)

1. Sync level adjustment

Measuring instrument	Oscilloscope
Subject	Anything
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	1F8
Adjustment level	286mVp-p

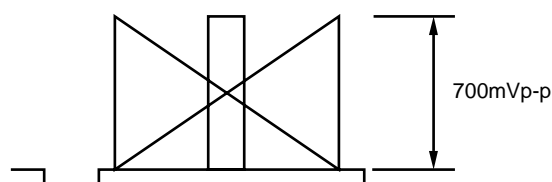
- Connect the oscilloscope to the VIDEO-OUT. Adjust the sync level to 286mVp-p.



2. Iris AE adjustment

Measuring instrument	Oscilloscope
Subject	Gray scale
Tape	—
Test point	VIDEO-OUT
Adjustment address	1FC
Adjustment level	700mVp-p

- Shoot the gray scale in the standard way. Observe the VIDEO-OUT signal on the oscilloscope screen and rewrite the data of address 1FC to get an amplitude of 700mVp-p as shown above.



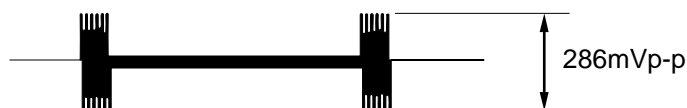
3. Black balance , AF noise level adjustment

Measuring instrument	None
Subject	Anything
Tape	—
Test point	None
Adjustment address	1FF
Adjustment level	01

- Write the data 01 to the address 1FF.
The following adjustments are automatically carried on ;
① Black balance adjustment
② AF noise level adjustment
at AGC Gain Min , AGC Gain Max and Gain up.

4. Burst gain adjustment

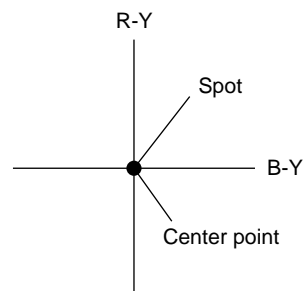
Measuring instrument	Oscilloscope
Subject	None
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	1F9
Adjustment level	286mVp-p



- 1) Measure the burst signal level on the oscilloscope. Using the address 1F9, adjust the burst amplitude to 286mVp-p.

5. White balance adjustment

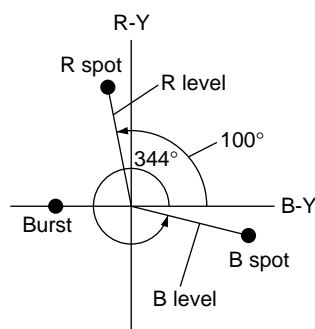
Measuring instrument	Vector scope
Subject	Gray scale
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	R-W/B 010, B-W/B 012
Adjustment level	R-W/B 0 % \pm 3 % B-W/B 0 % \pm 3 %



- 1) Adjust the spot to the center of vector scope (R-Y : 0%, B-Y : 0%) using address 010 and 012.

6. Color gain adjustment

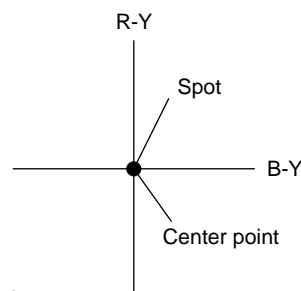
Measuring instrument	Vector scope
Subject	Color bar chart
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	R GAIN 0DD B GAIN 0DB R MAT 0D7 B MAT 0D9
Adjustment level	R GAIN; Burst ratio 1.2 \pm 0.1 B GAIN; Burst ratio 1.0 \pm 0.1 R MAT; 100 \pm 2° B MAT; 344 \pm 2°



- 1) Using the address 0DD, adjust the R level to a burst ratio of 1.2. With the address 0DB, adjust the B level to a burst ratio of 1.0.
- 2) Using the address 0D7, adjust the R phase to 100°. With the address 0D9, adjust the B phase to 344°.
- 3) Repeat the above steps 1) and 2).

7. Out door white balance adjustment

Measuring instrument	Vector scope
Subject	Gray scale
Tape	—
Test point	VIDEO OUT (Terminated in 75 Ω)
Adjustment address	R-OUT DOOR 016 B-OUT DOOR 018
Adjustment level	R-OUT DOOR; 0 \pm 3 % B-OUT DOOR; 0 \pm 3 %



- 1) Attach the color temperature conversion filter (JiGHOYA-LB165) to the front of the lens.
- 2) Using the addresses R-OUT DOOR 016 and B-OUT DOOR 018, adjust the spot to the center.
- 3) Take off the color temperature conversion filter.

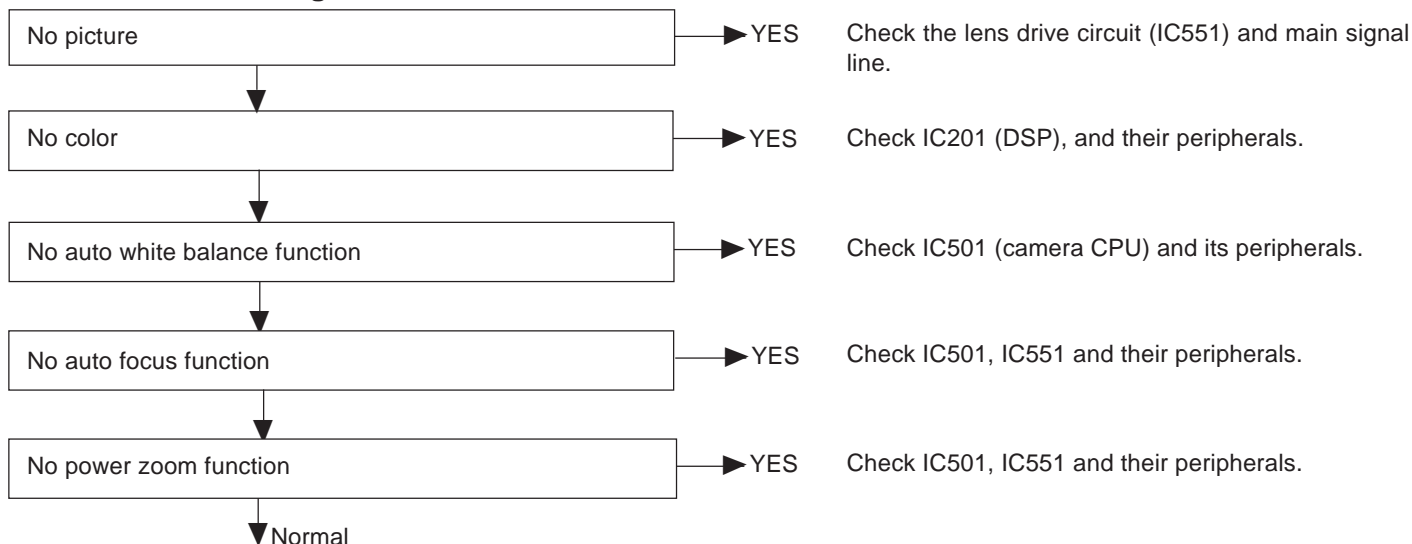
When you have finished, write FF to the adress 1FE to exit camera signal adjustment mode.

6-5. TROUBLE SHOOTING

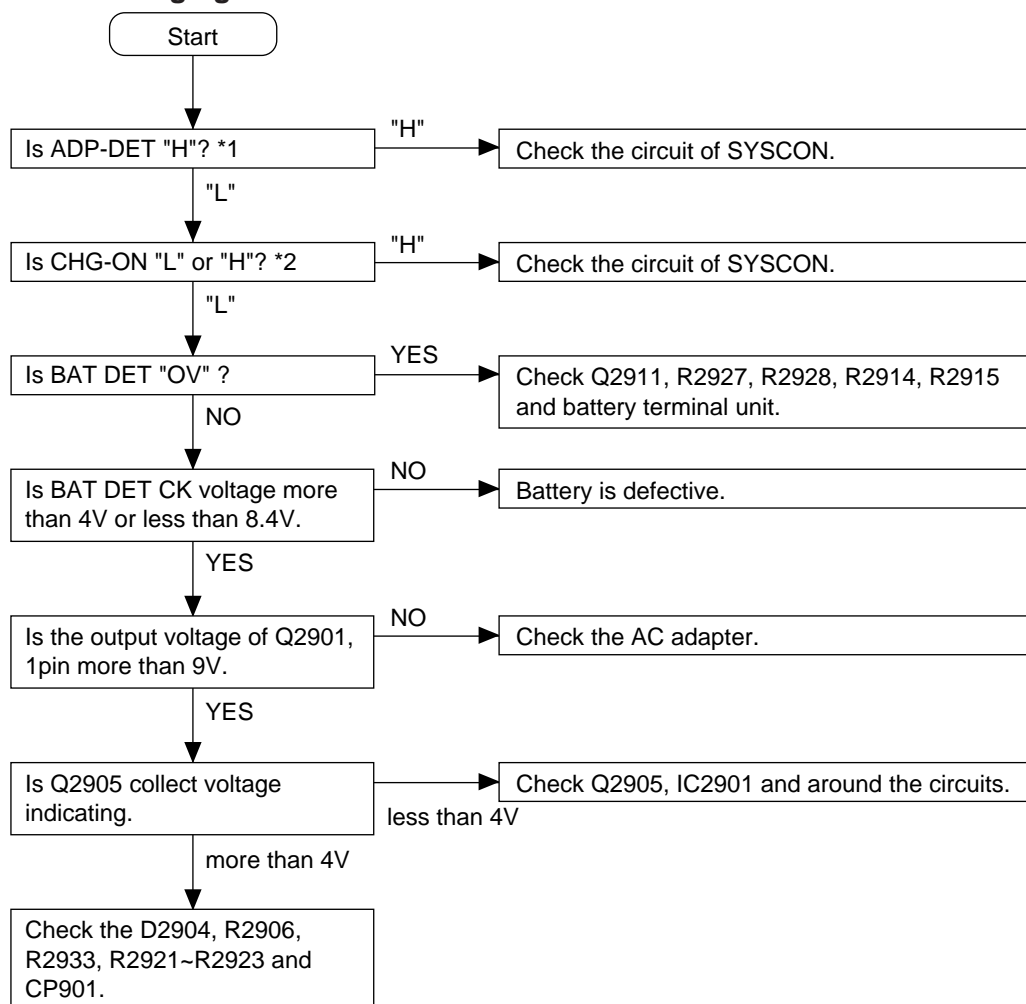
6-5-1. Classification of troubles



6-5-2. Troubleshooting for the camera section



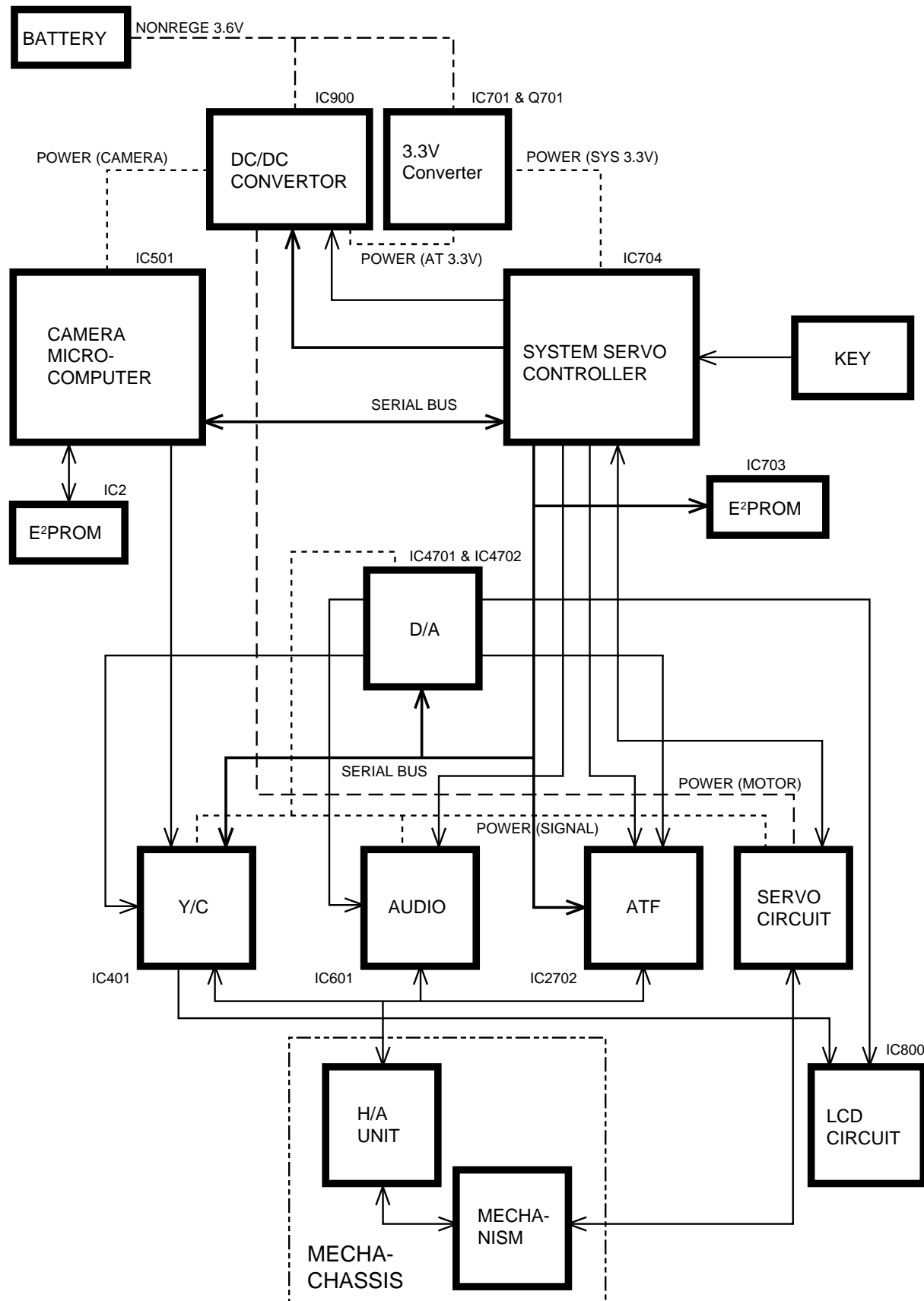
6-5-3. Charging mode troubles



*1: Inputting DC power and set the ADP DET "L".

*2: Inputting charging mode as CHG ON "L".

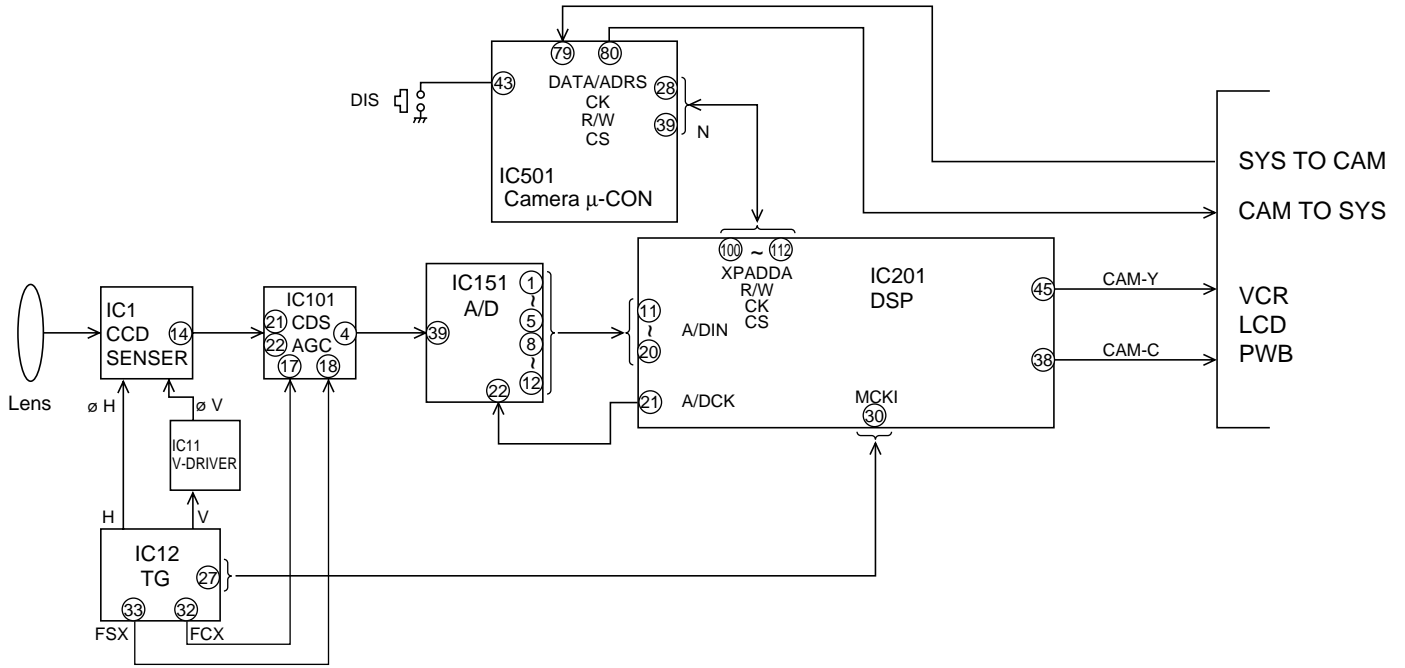
7. SYSTEM BLOCK DIAGRAMS



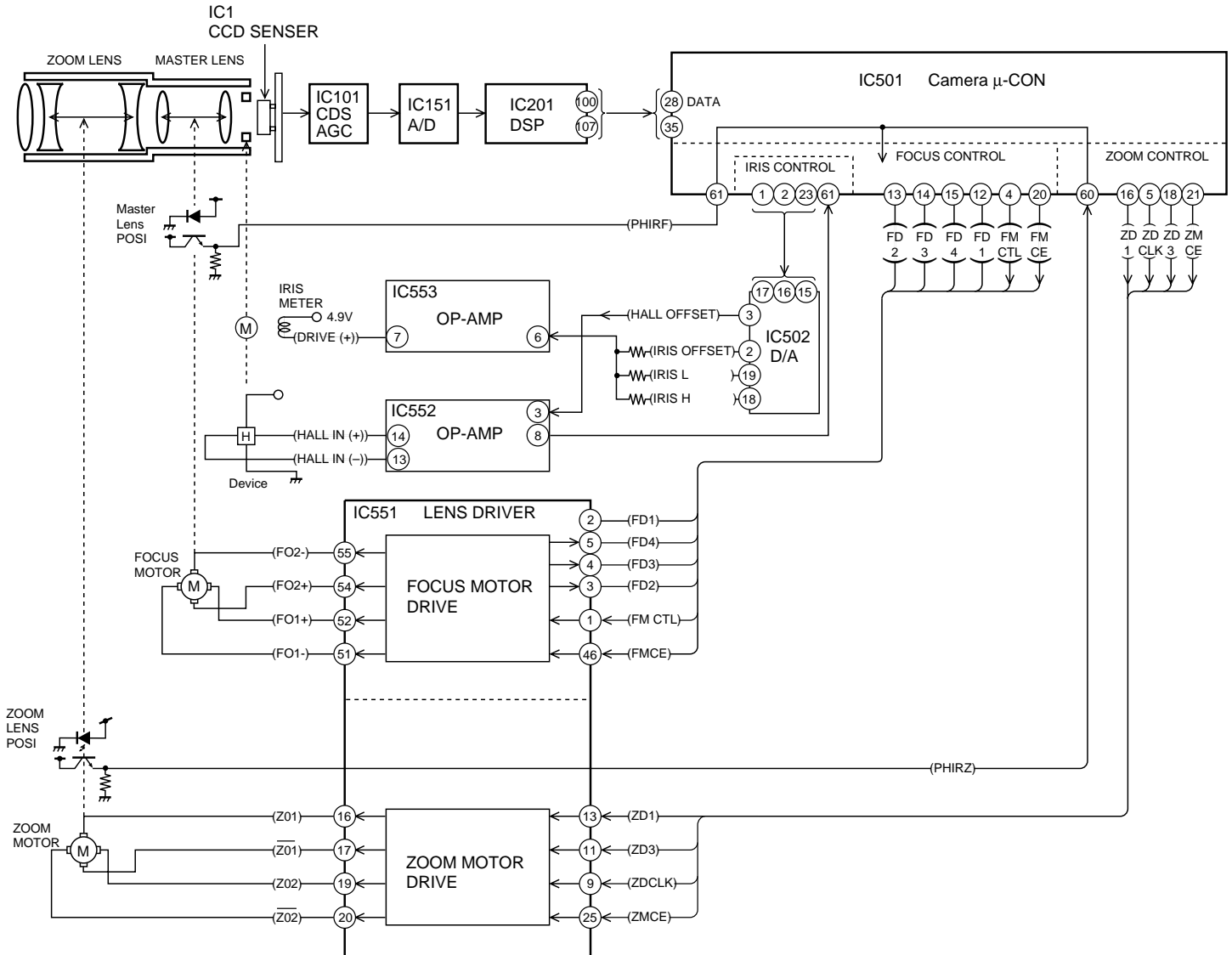
* On this model, all the circuits of the VCR and camera sections are controlled by IC704 and IC501.

- 1) IC501 and IC401 are controlled with the serial data from IC704.
- 2) IC703 is a memory that serves to store the adjustment data of the VCR section.
- 3) IC2 is a memory that serves to store the adjustment data of the camera section.
- 4) The other circuits and ICs are under the L/H level or the PWM control.

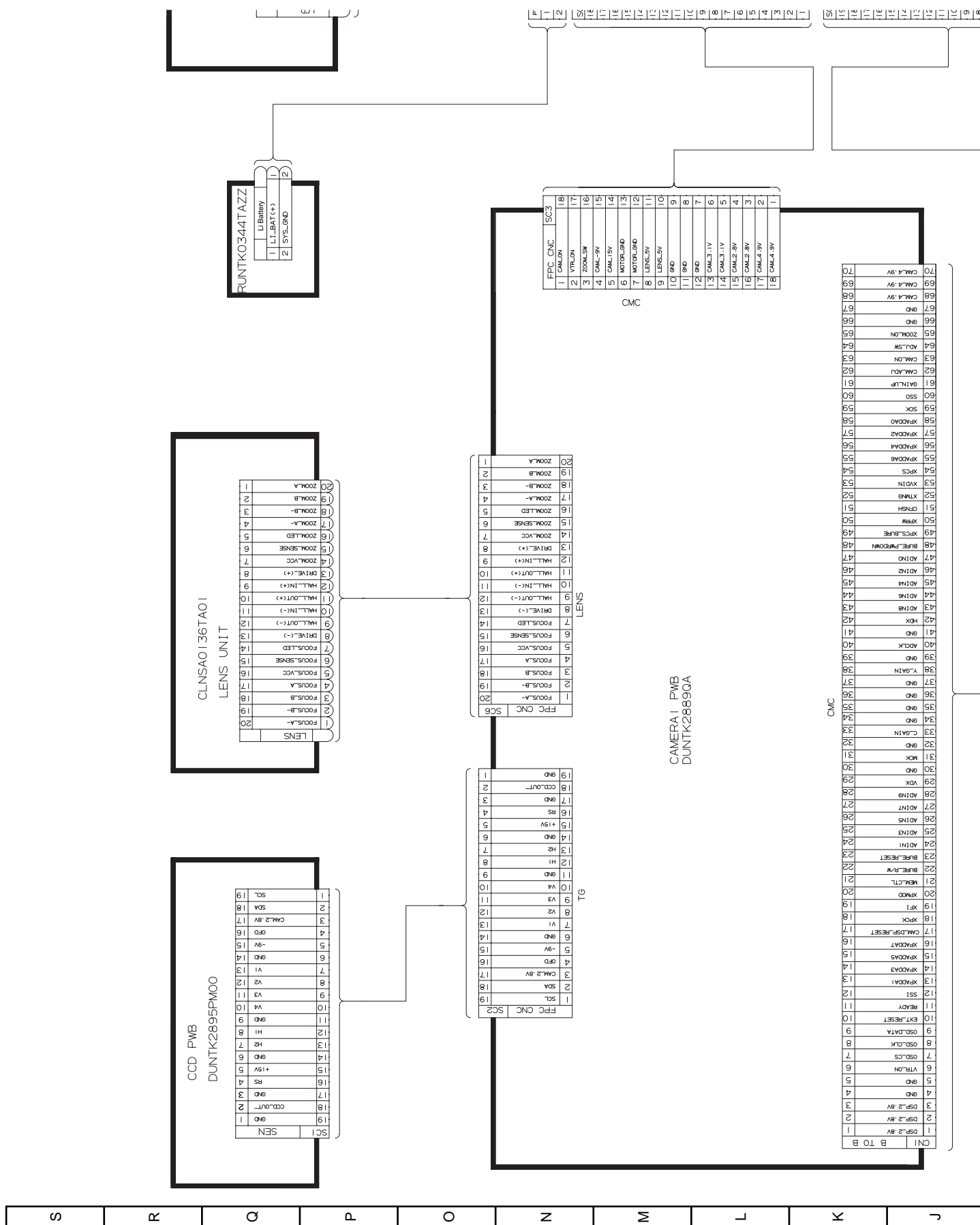
7-1. CAMERA SECTION BLOCK DIAGRAM

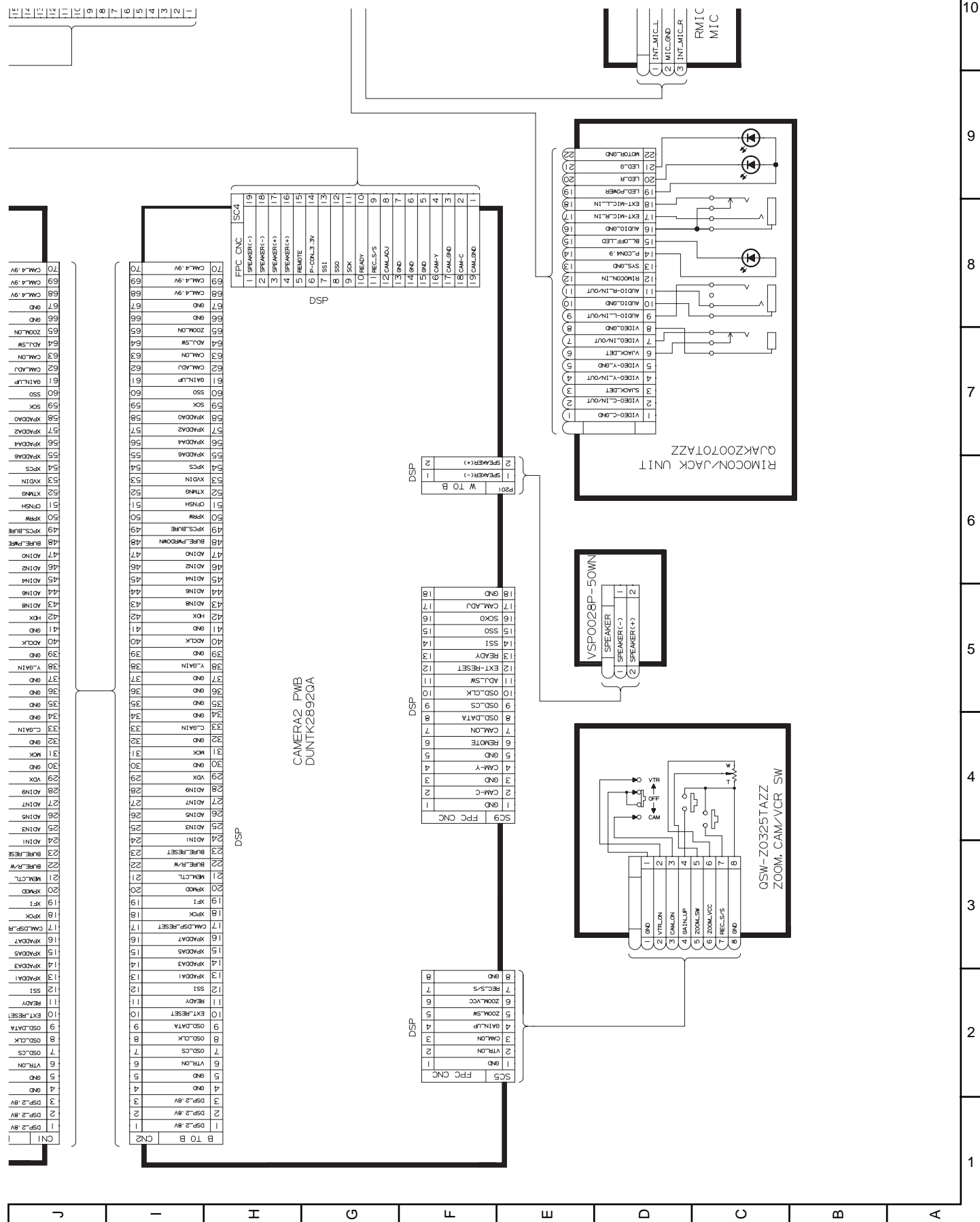


7-2. LENS DRIVE BLOCK DIAGRAM



3	4
	2

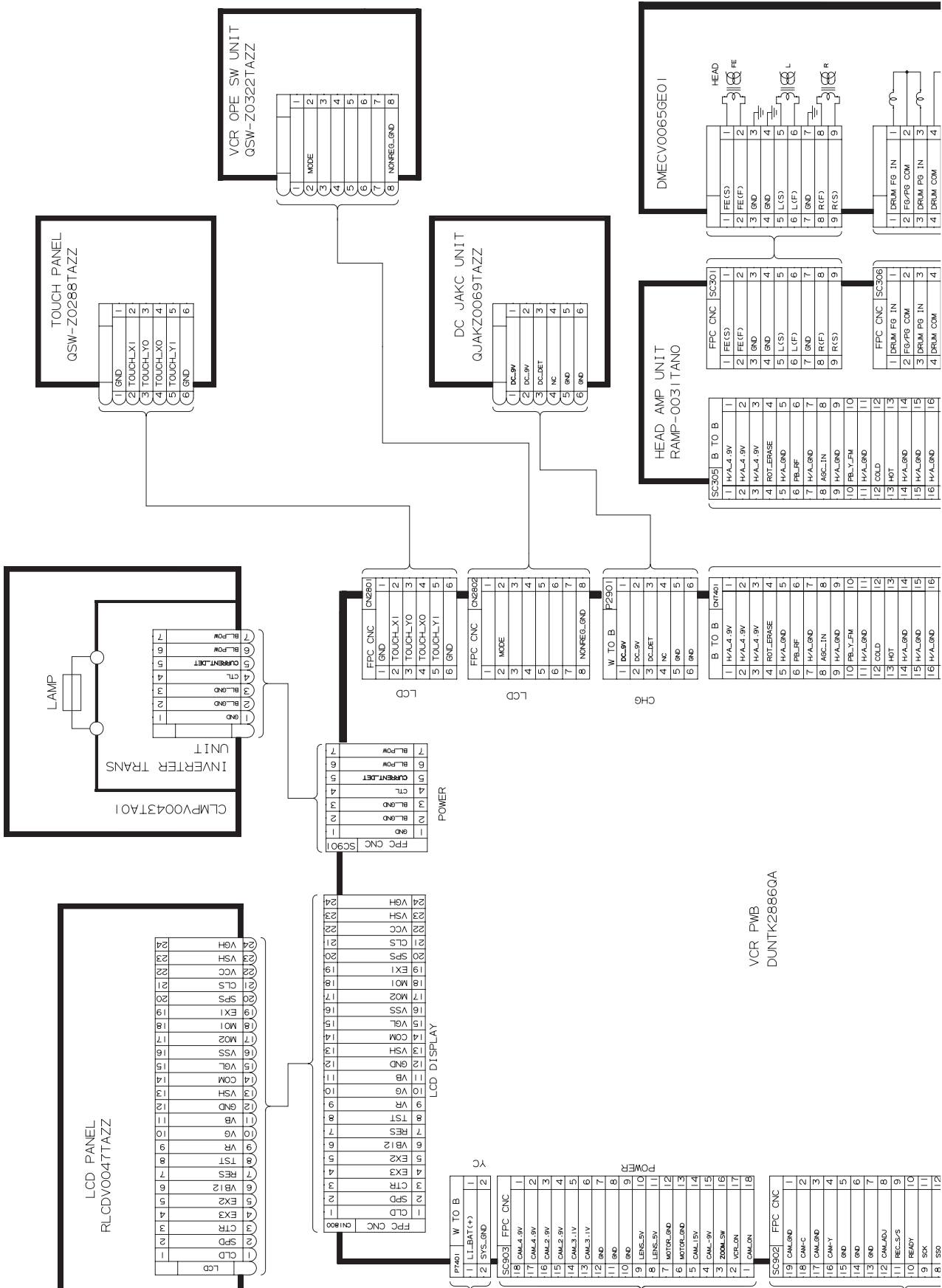


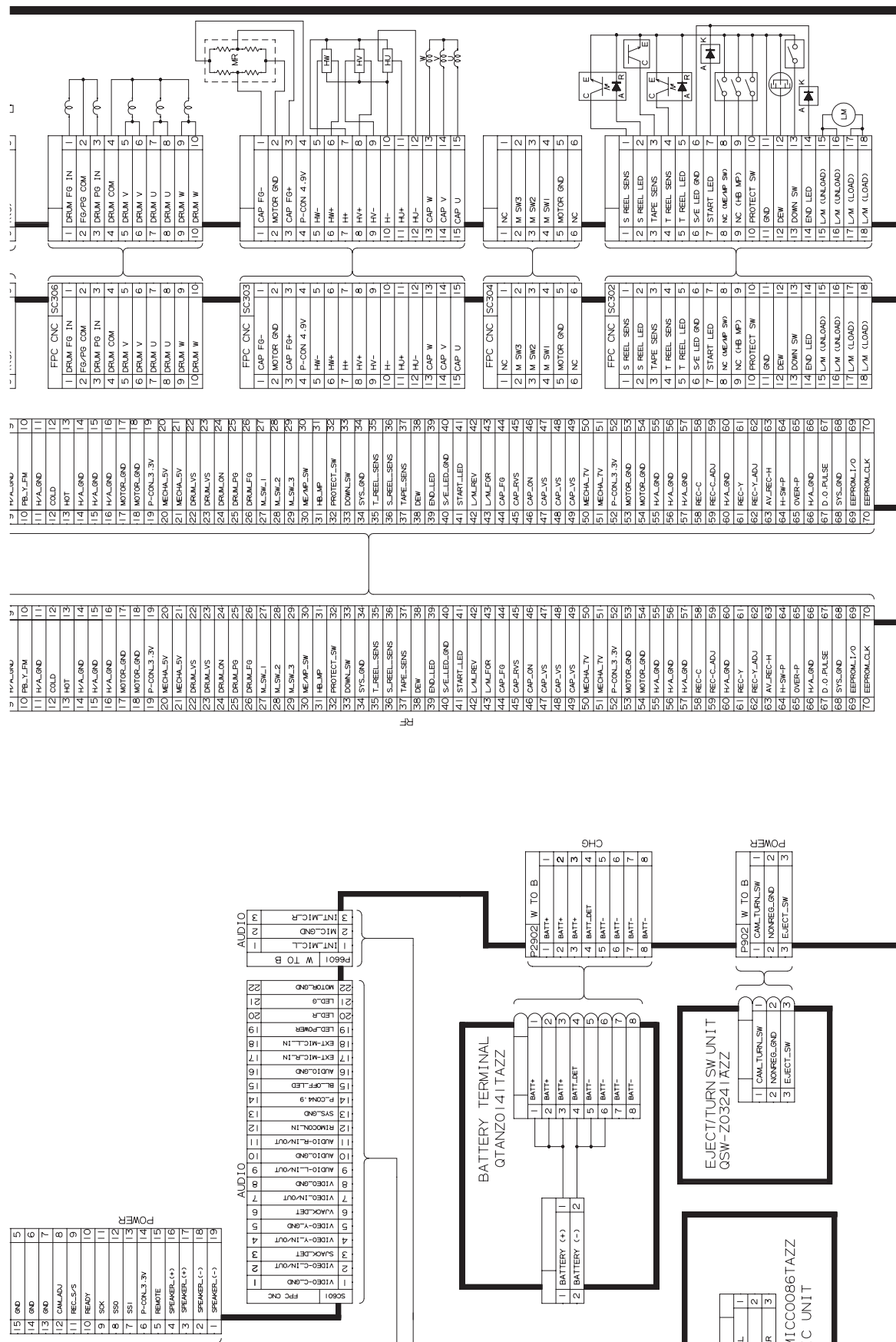


LOCATION MAP:

1	2	3	4
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 (3/4)



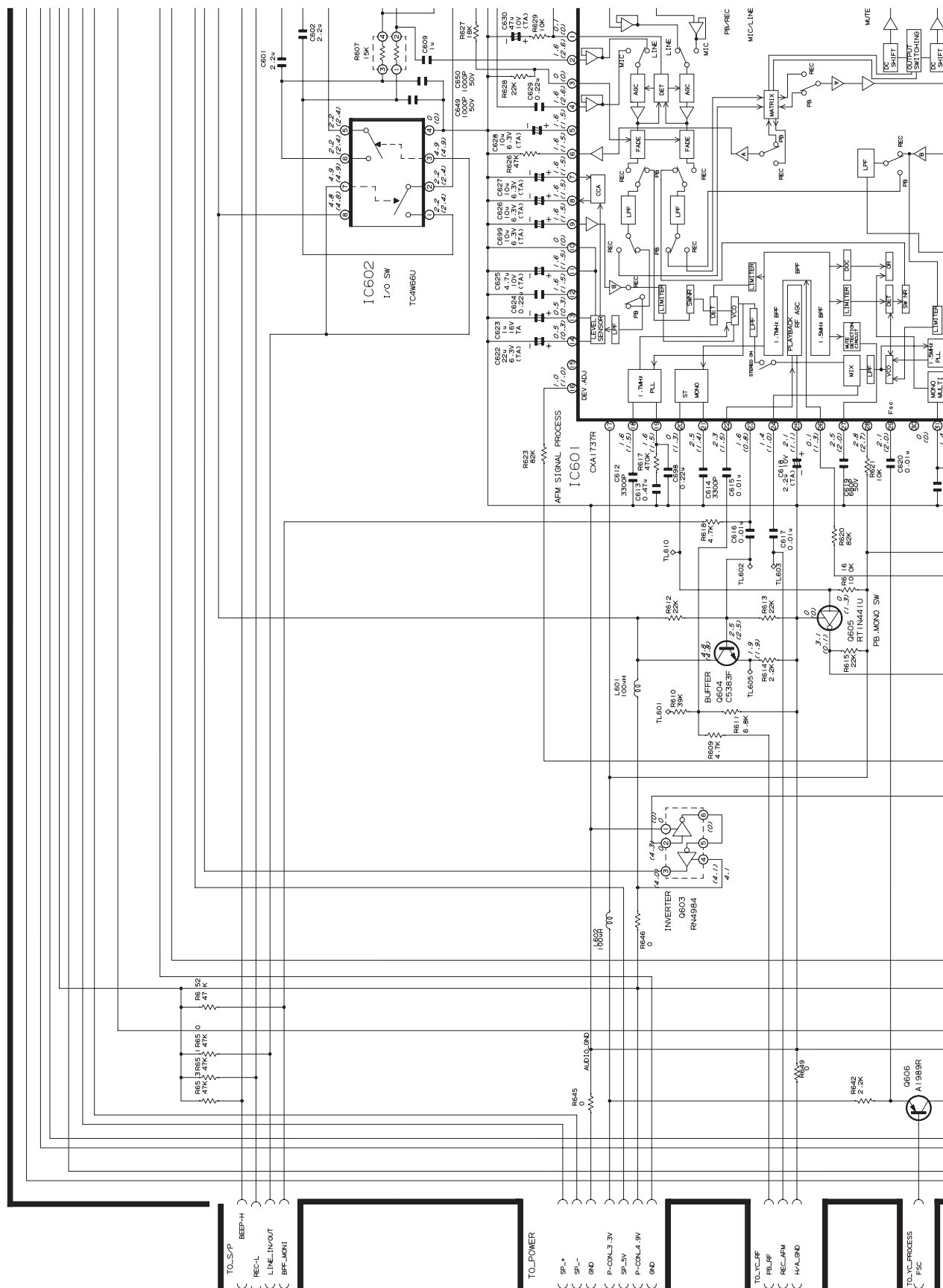


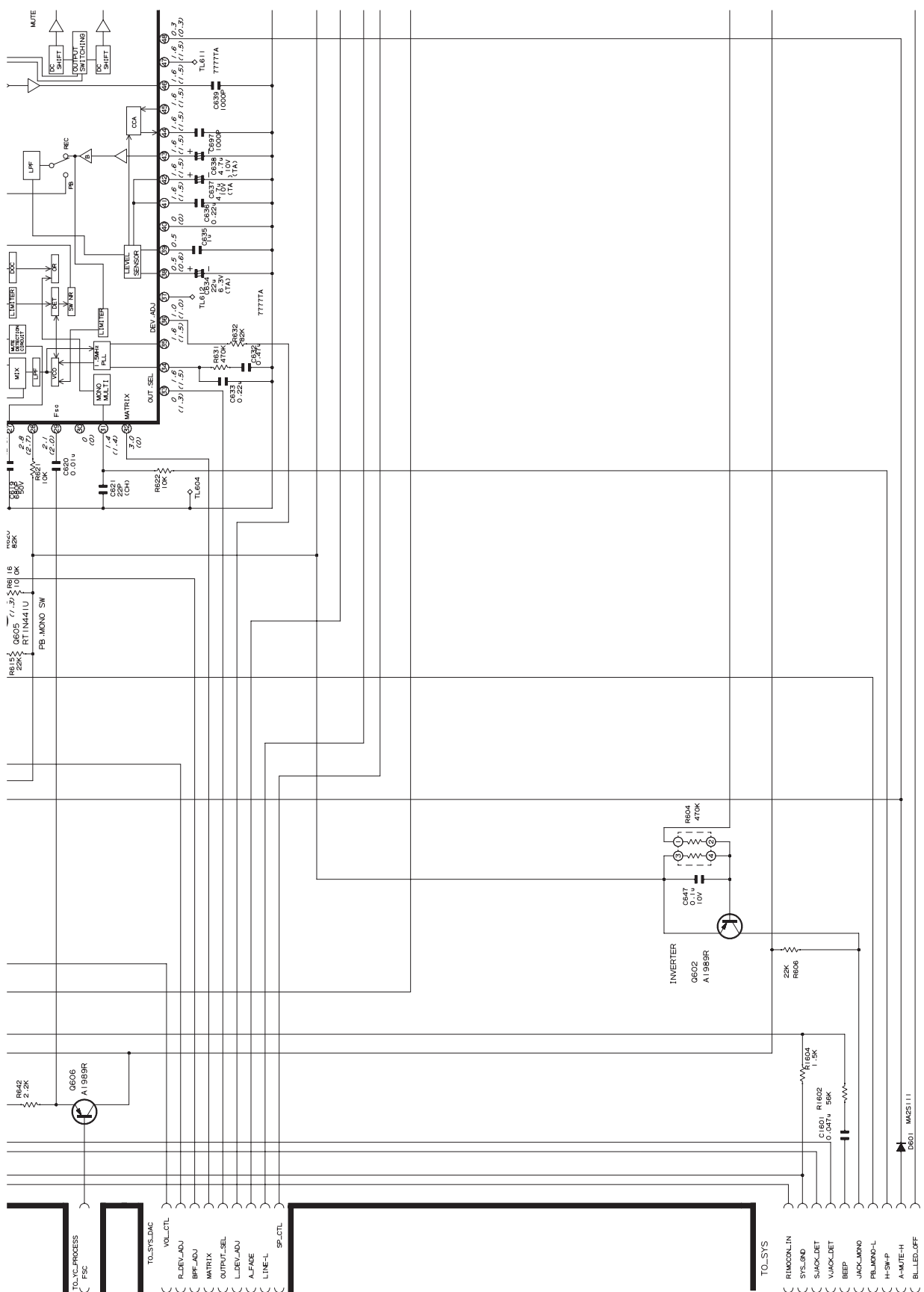
8-2. AUDIO CIRCUIT SCHEMATIC DIAGRAM

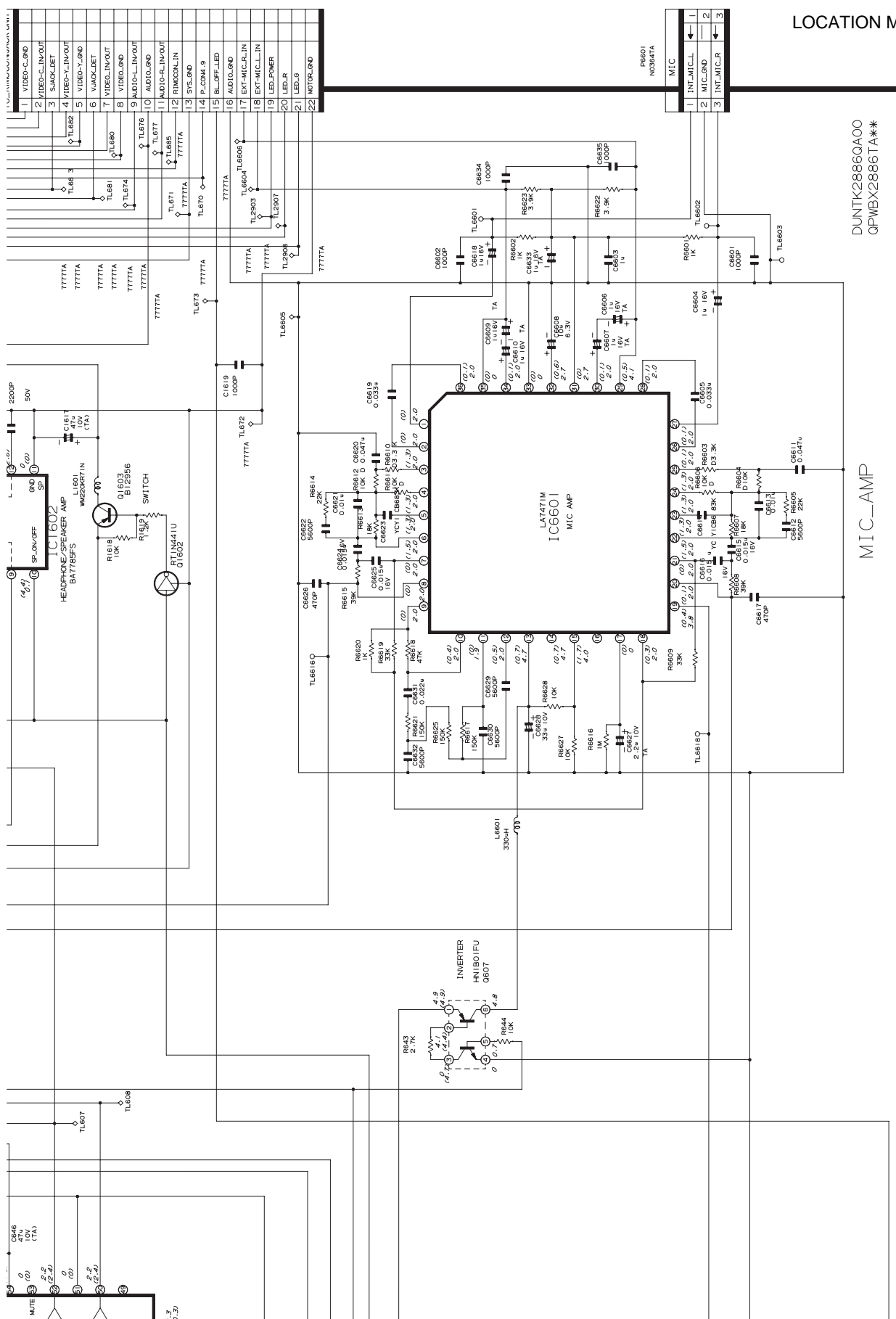
LOCATION MAP:

3
2
4

 (1/4)







LOCATION MAP:  (4/4)

DUNTK2886QA00
QPWBX2886TA**

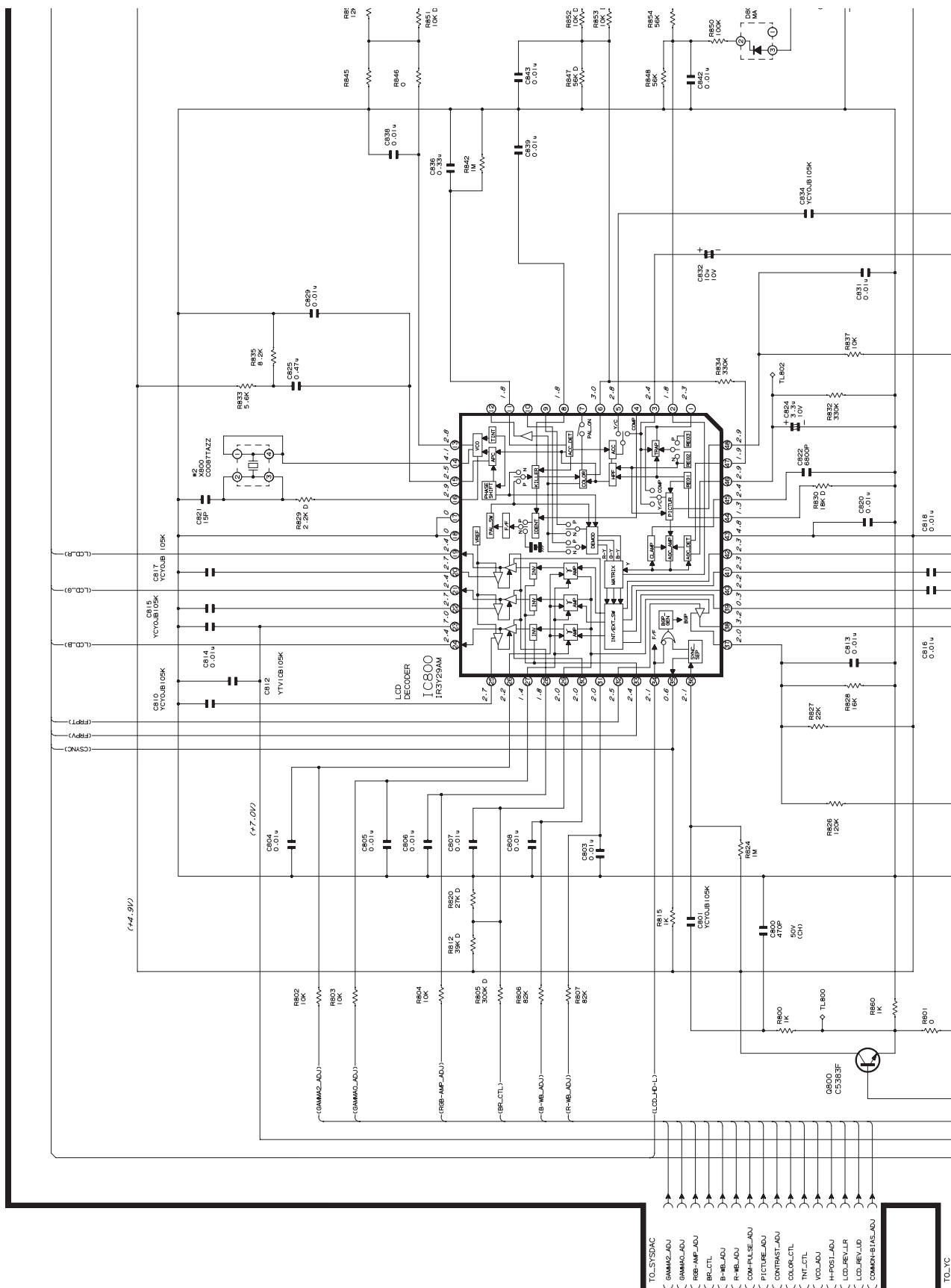
MIC-AMP

8-3. LCD CIRCUIT SCHEMATIC DIAGRAM (VL-H870U/H875U)

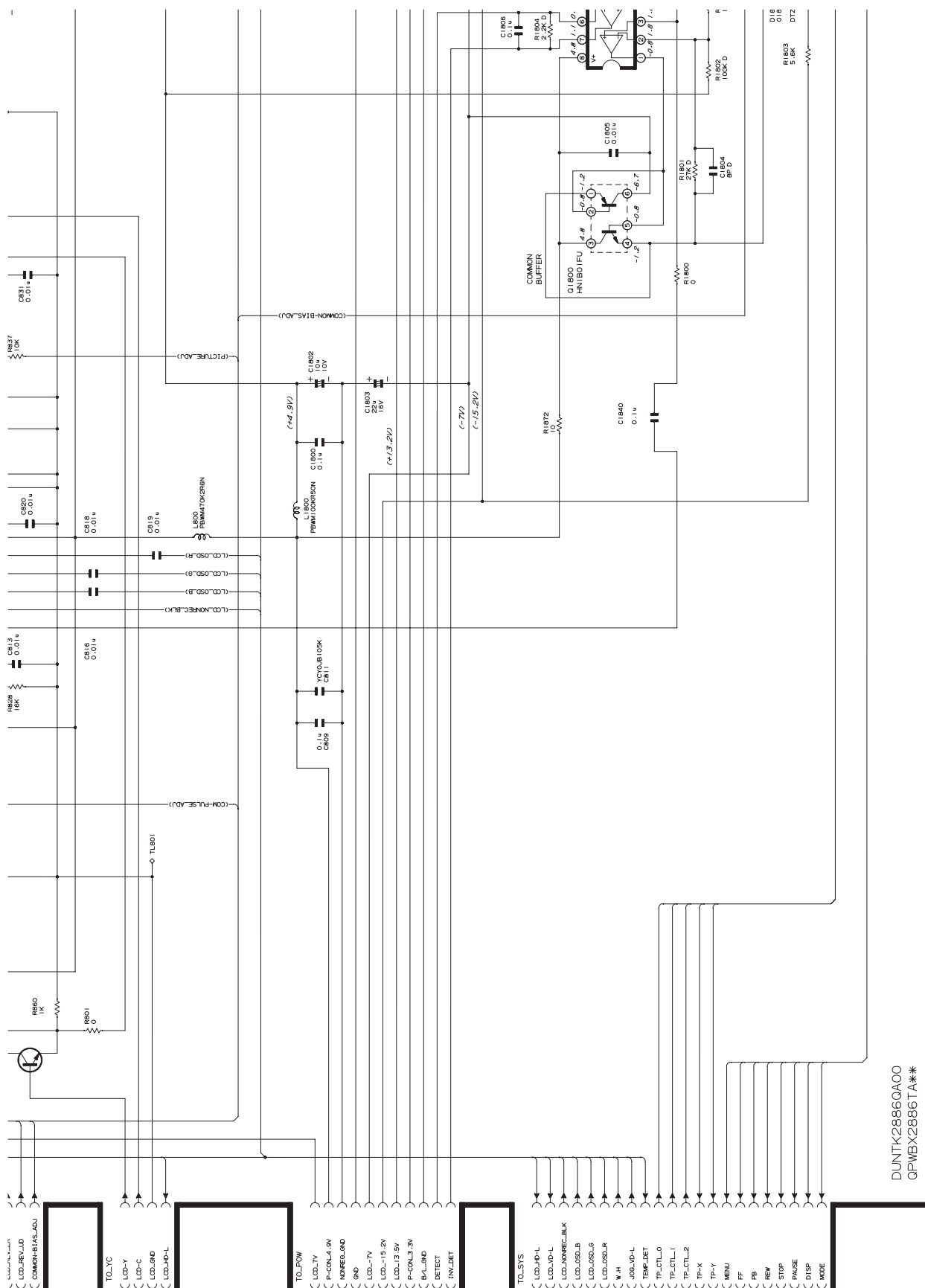
LOCATION MAP:

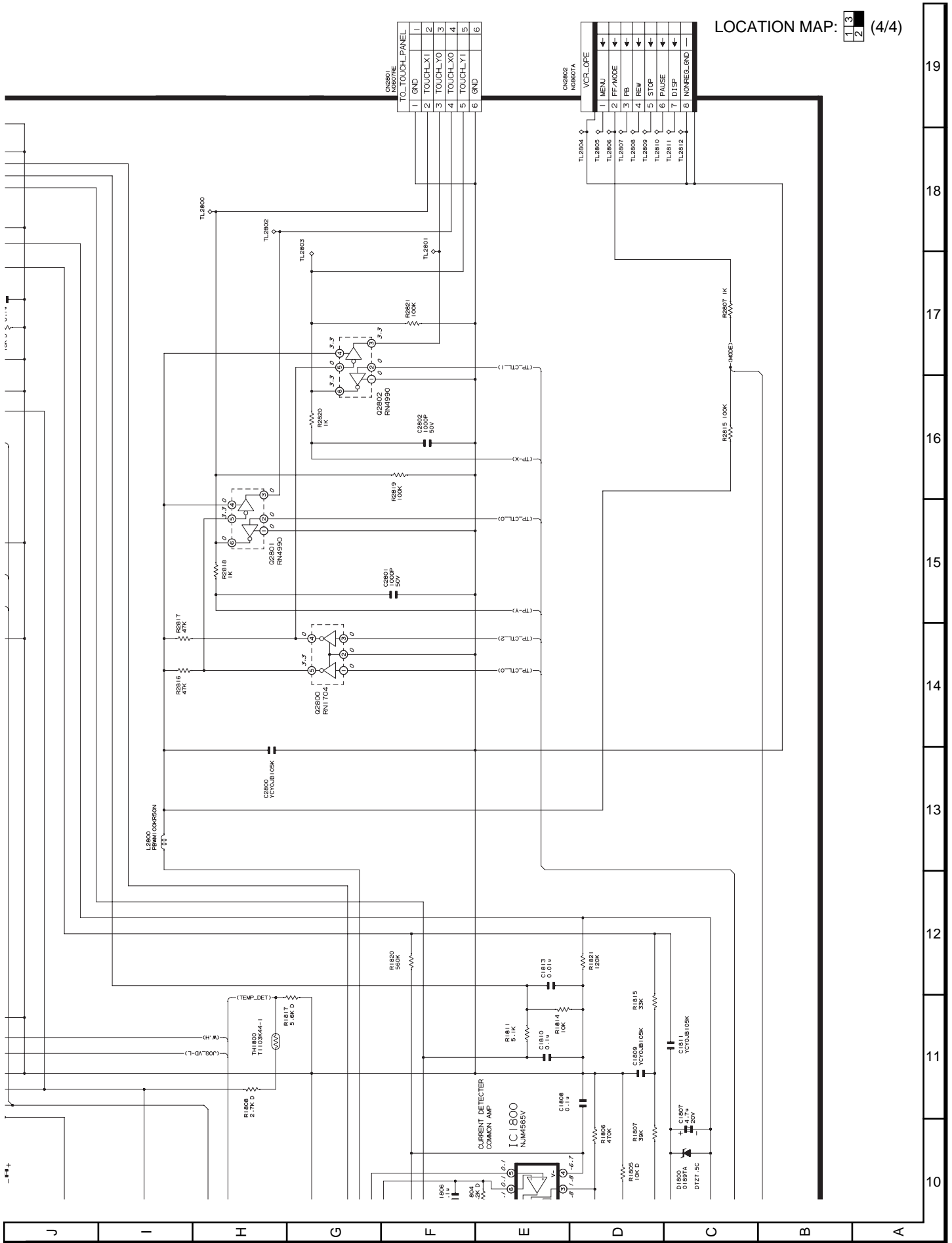
3
2
4

 (1/4)



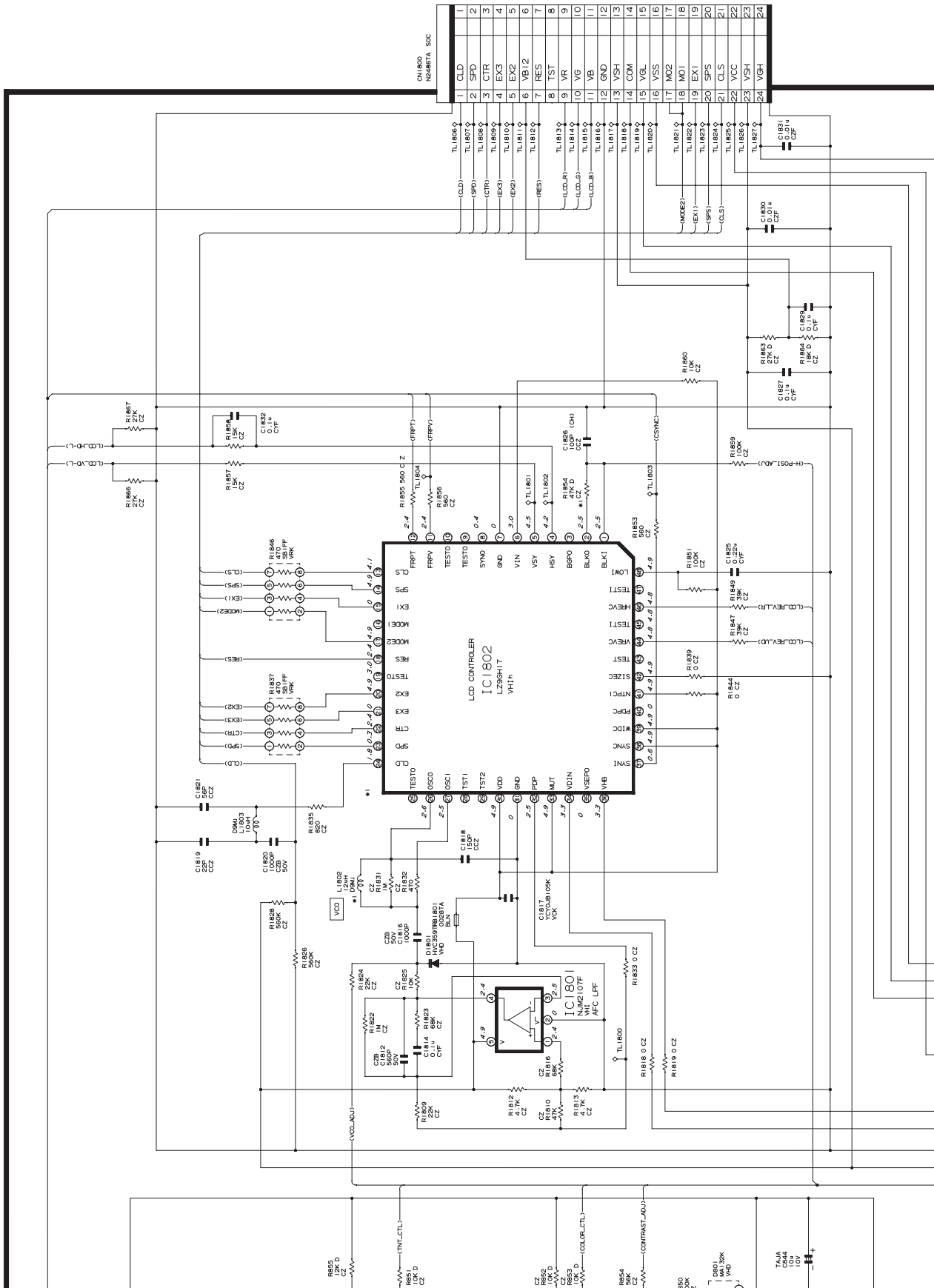
S	R	Q	P	O	N	M	L	K	J
---	---	---	---	---	---	---	---	---	---







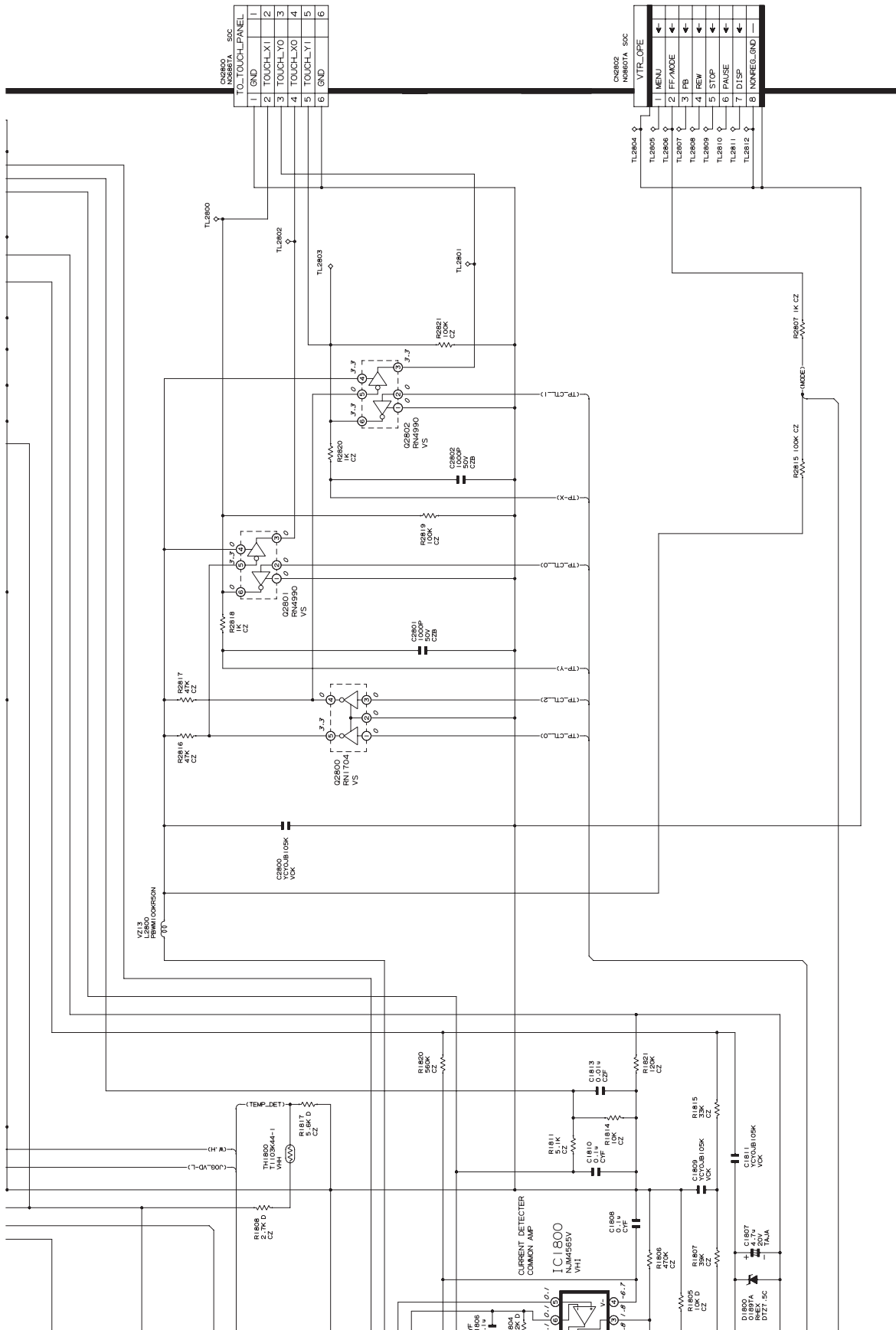
LOCATION MAP:  (3/4)



LOCATION MAP:

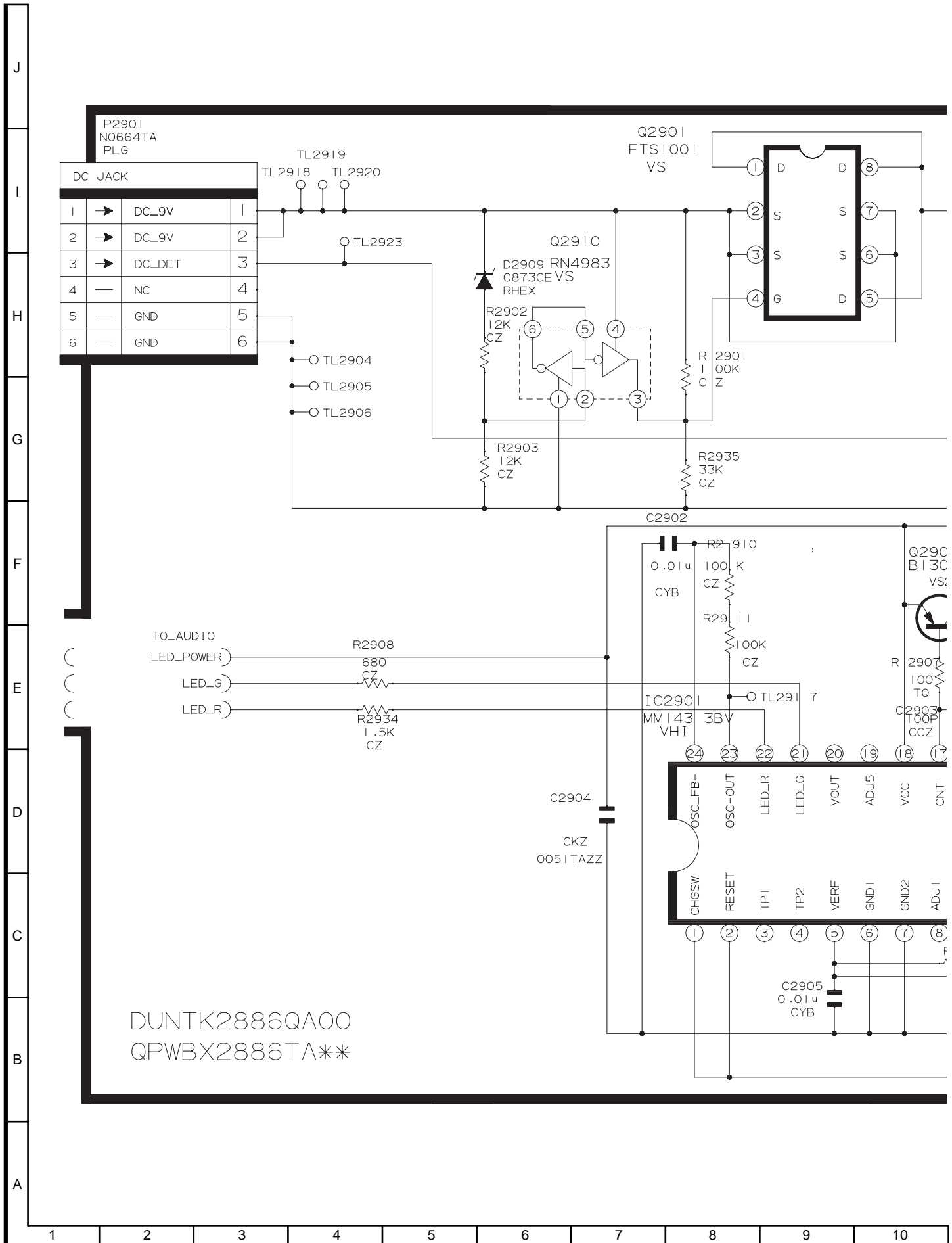
1	3
2	

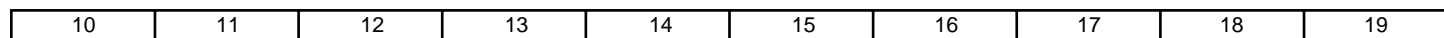
 (4/4)



19
18
17
16
15
14
13
12
11
10

8-4. CHARGE CIRCUIT SCHEMATIC DIAGRAM



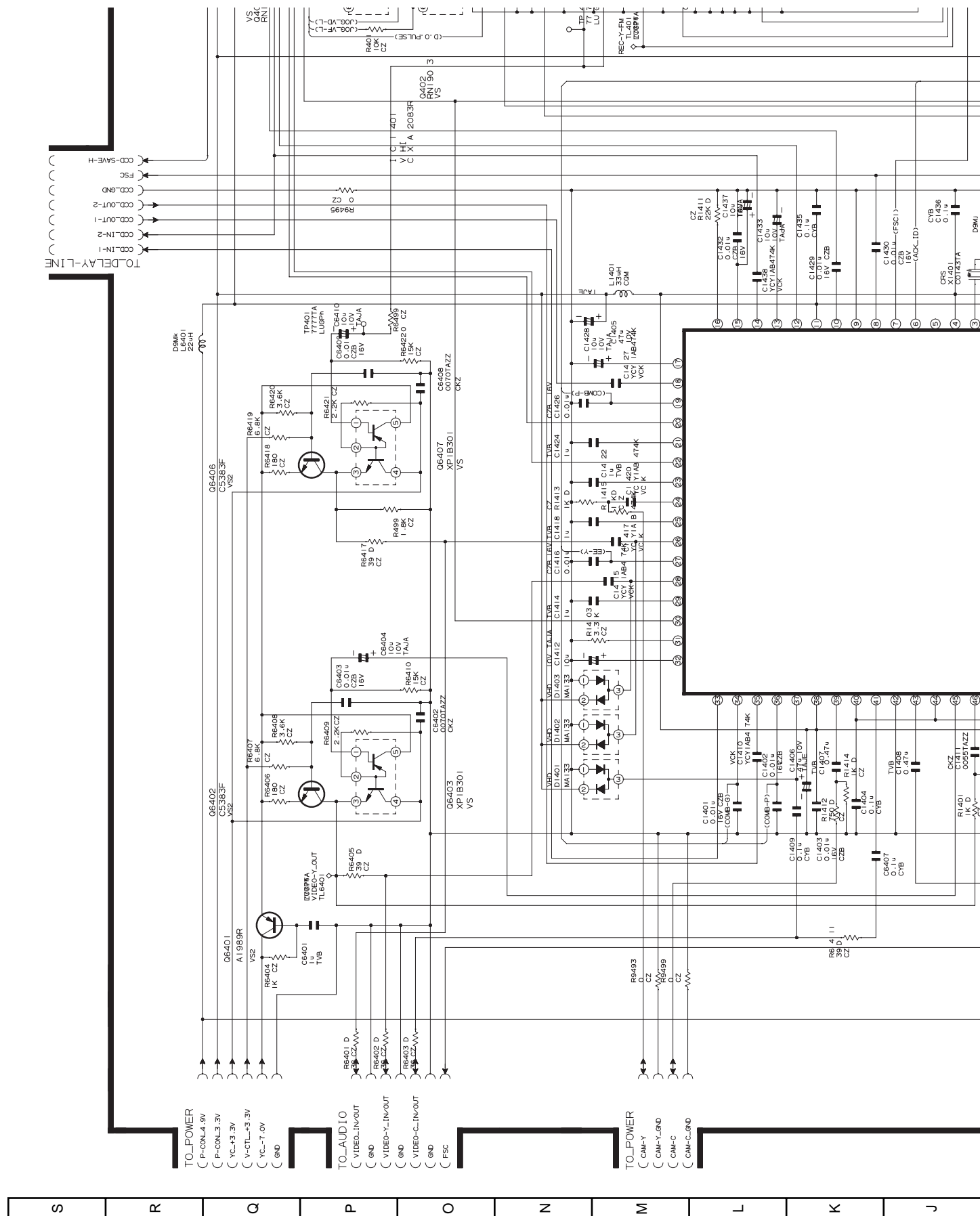


8-5. YCPROCESS CIRCUIT SCHEMATIC DIAGRAM

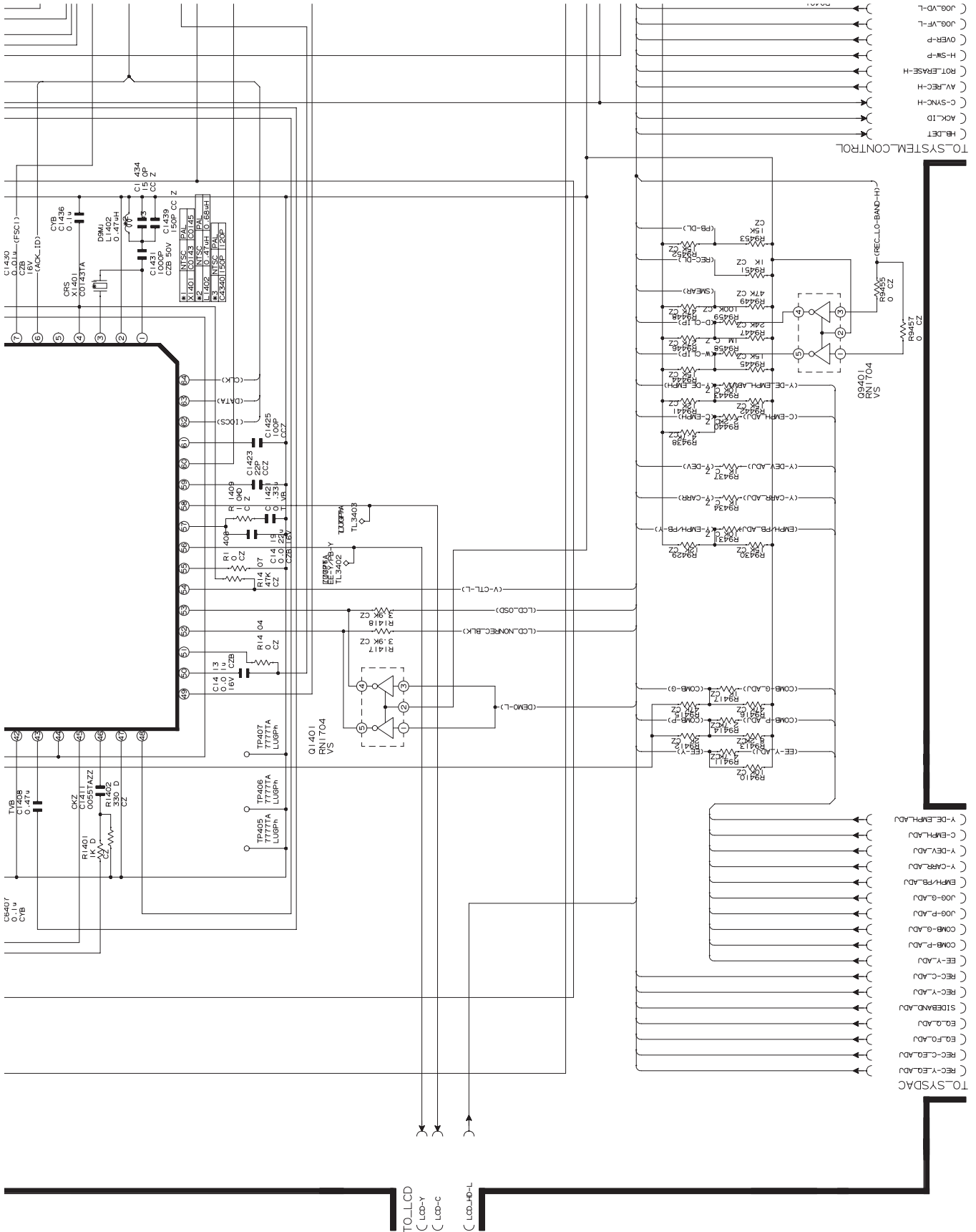
LOCATION MAP:

3
2
4

 (1/4)



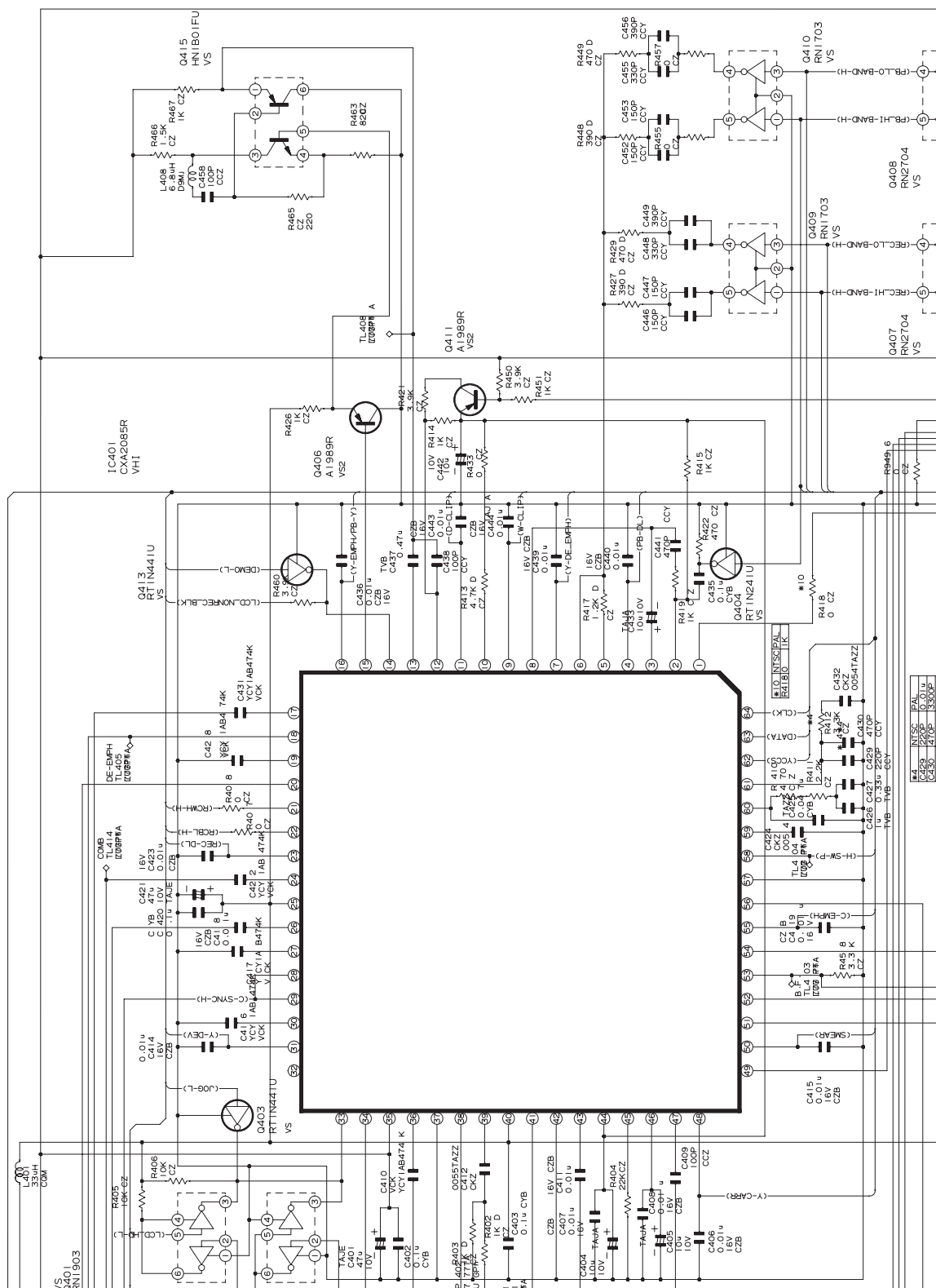
LOCATION MAP: (2/4)



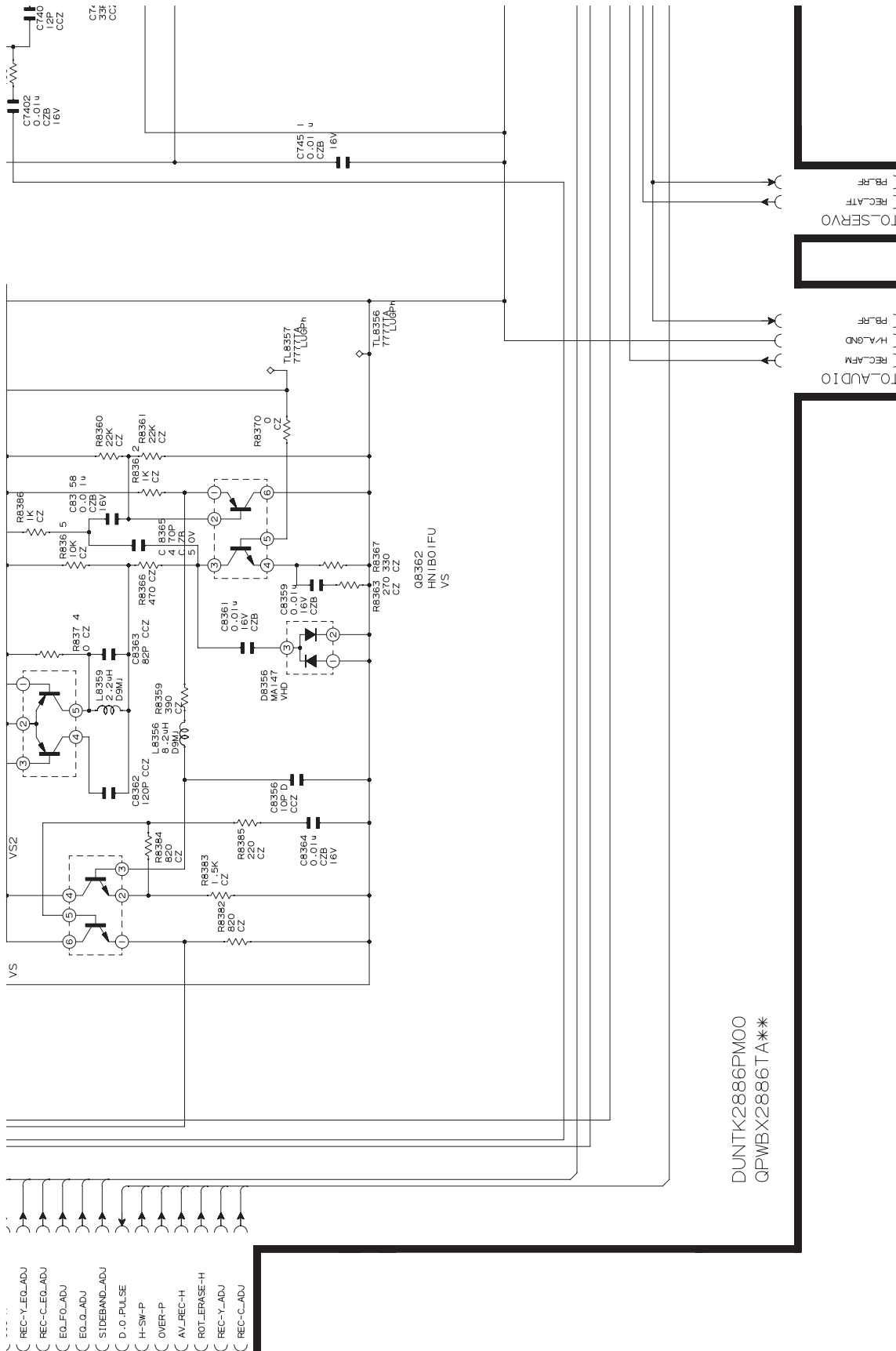
LOCATION MAP:  (3/4)



(3/4)







LOCATION MAP:

3	4
1	

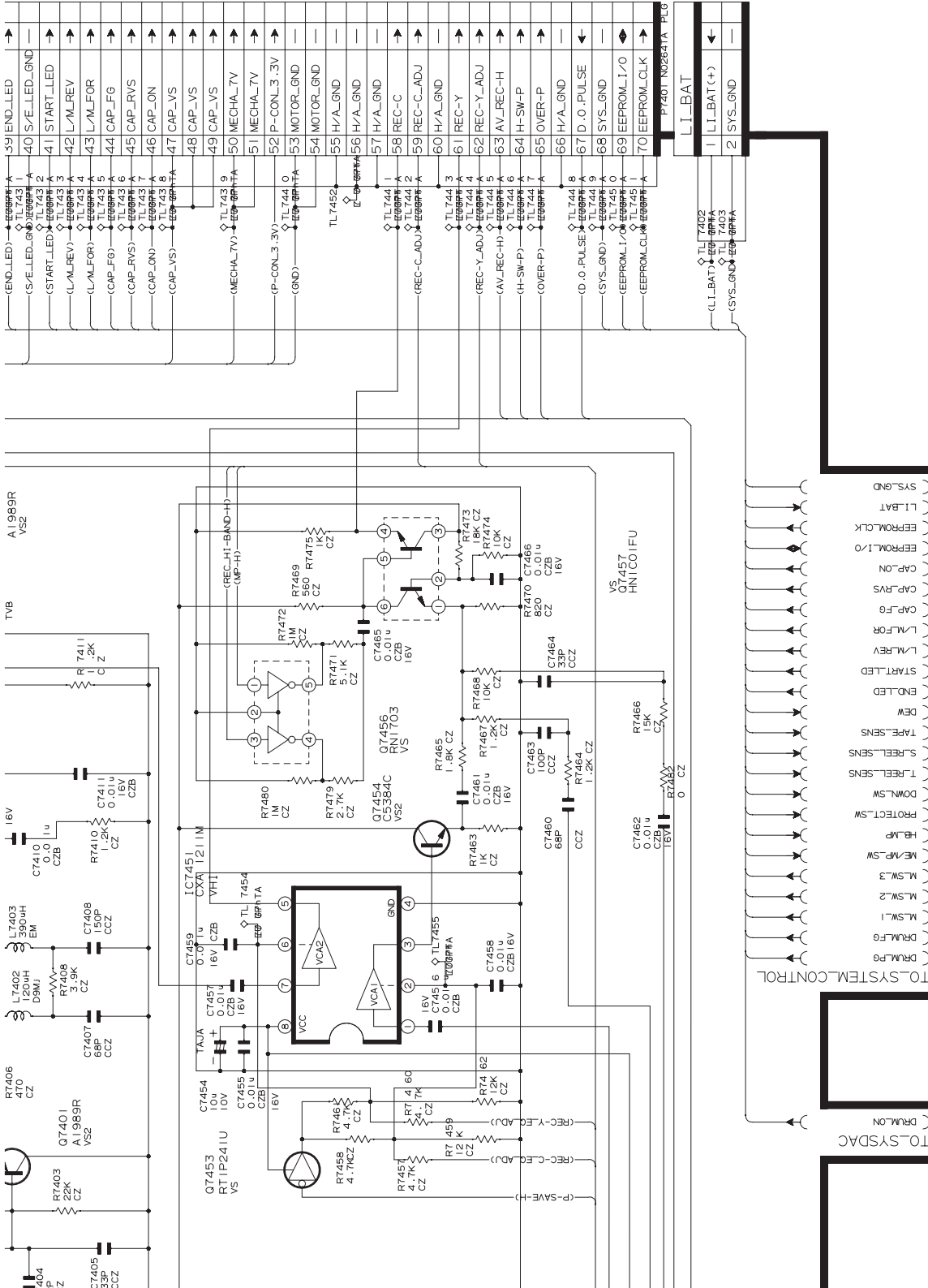
 (2/4)

DUNTK2886PM00
QPWBX2886TA**

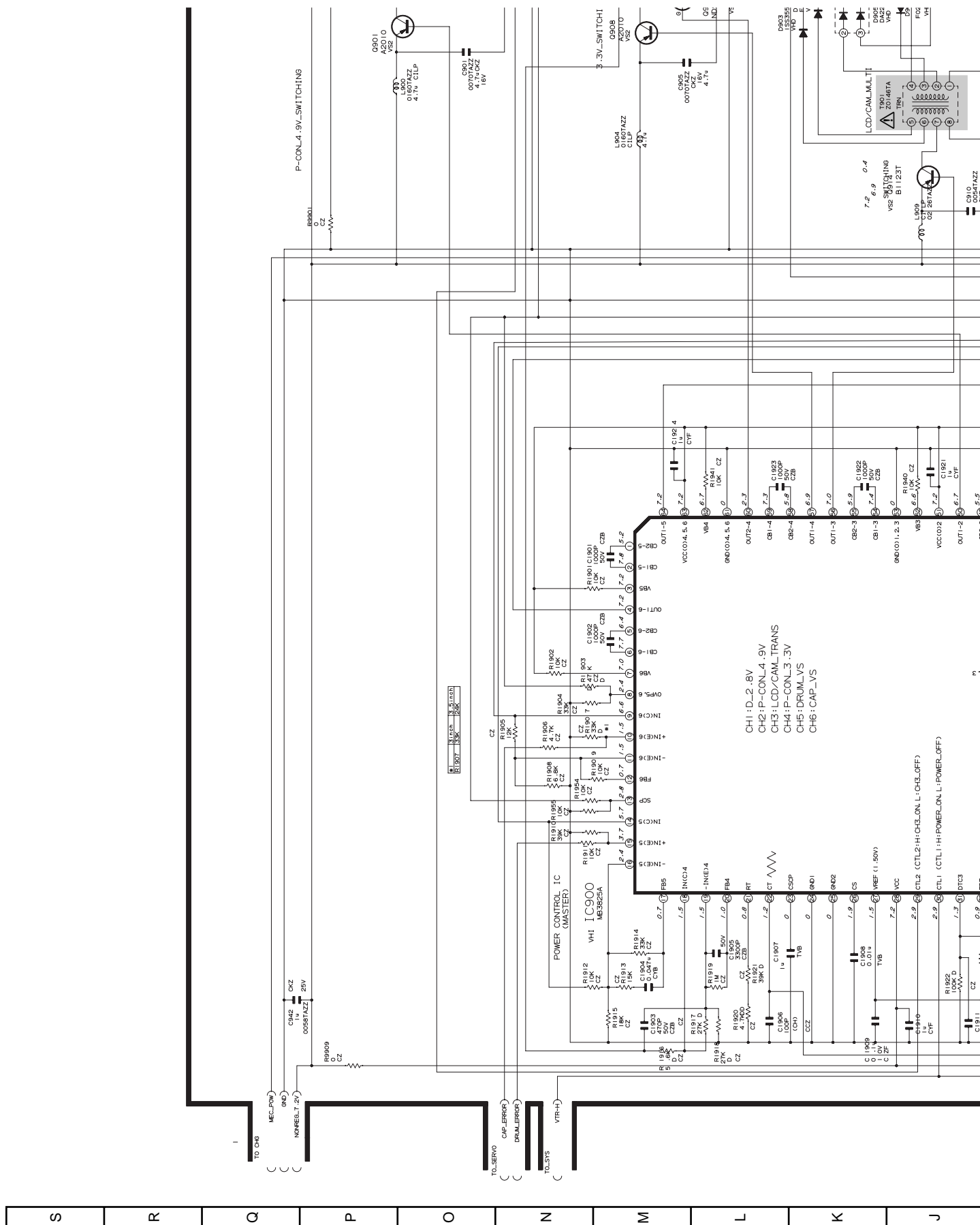
LOCATION MAP:

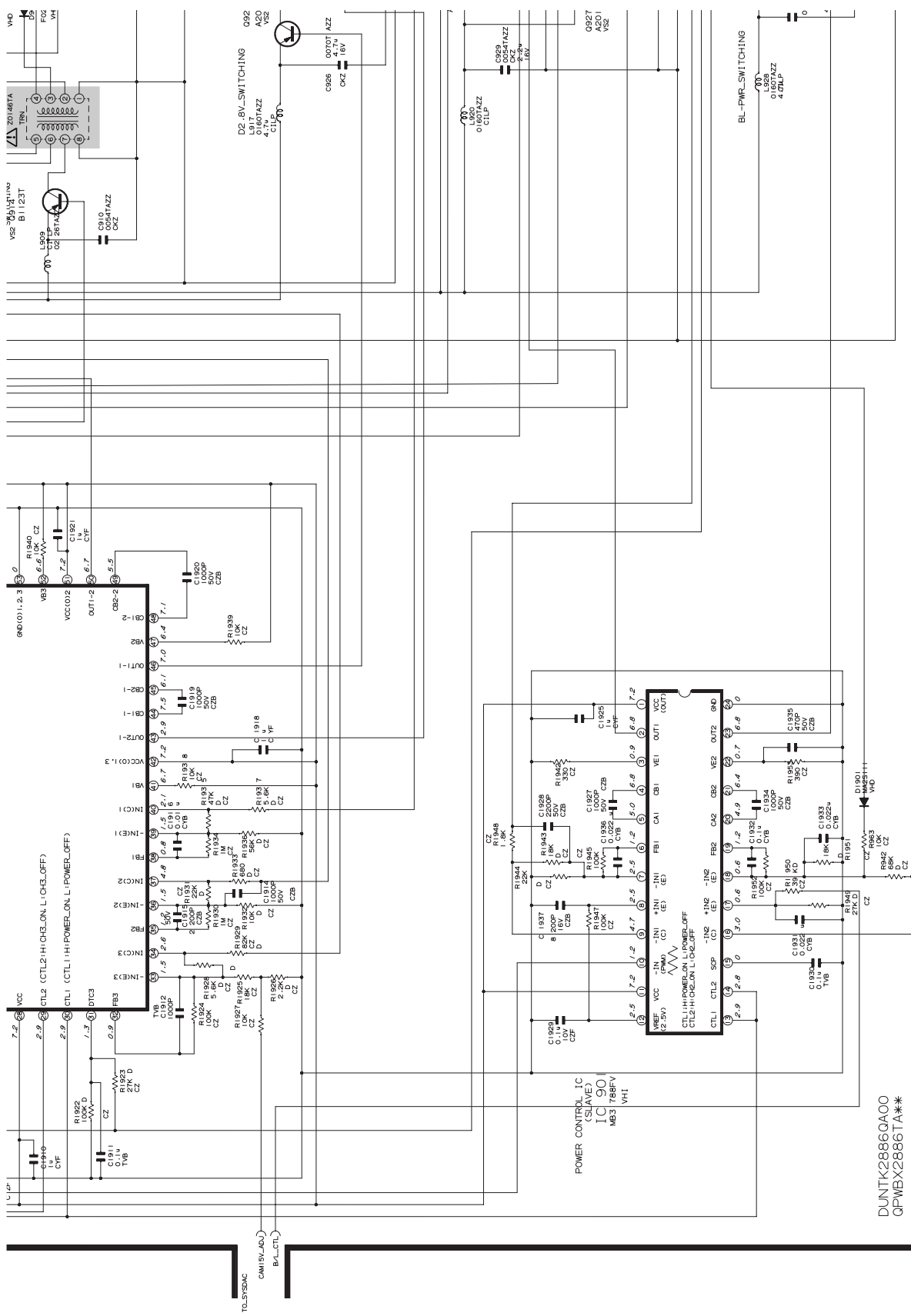
1	3
2	

 (4/4)



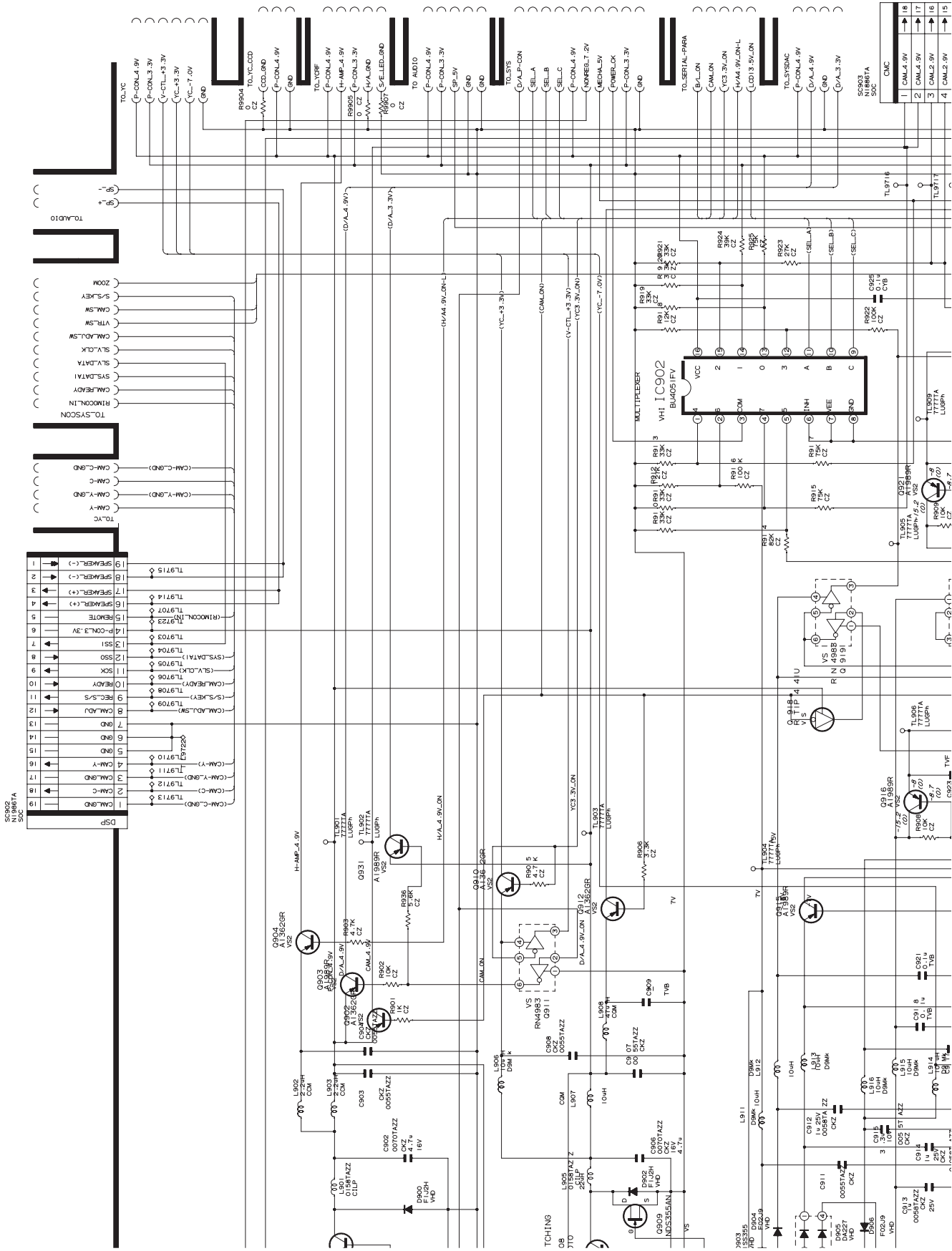
⚠ AND SHADED COMPONENTS=SAFETY RELATED PARTS



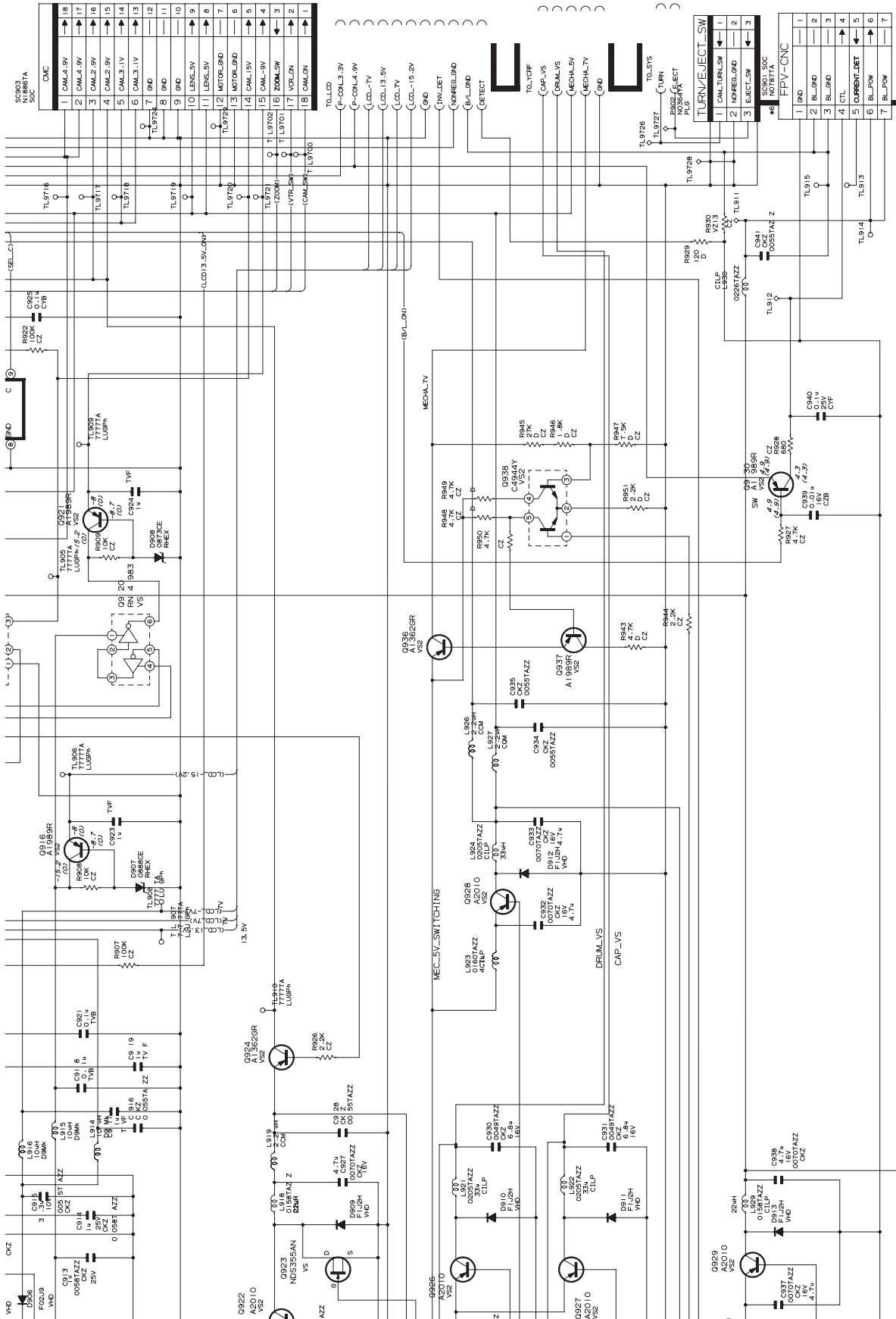


DUNTK2886QA00
QPWBX2886TA**

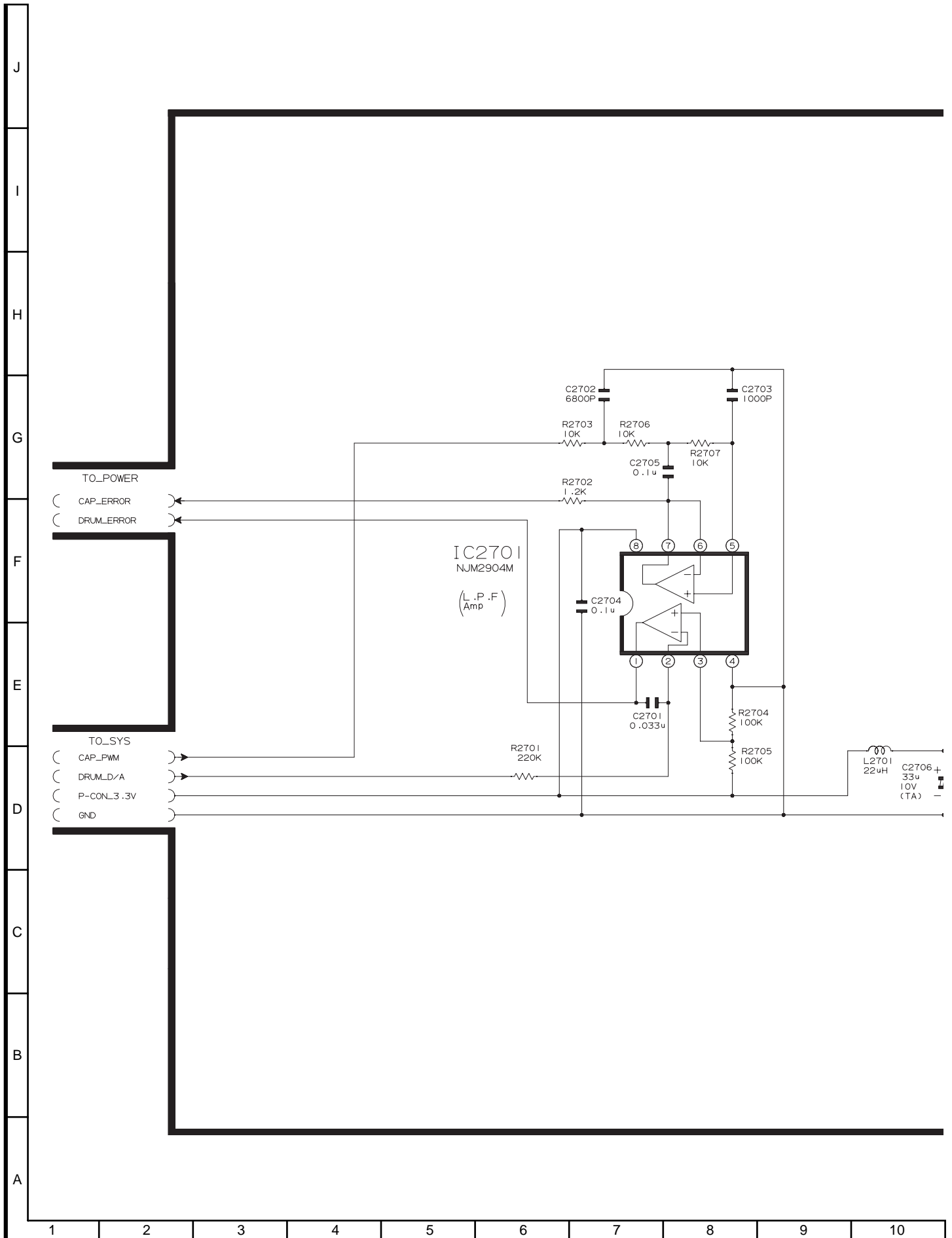
LOCATION MAP: (3/4)

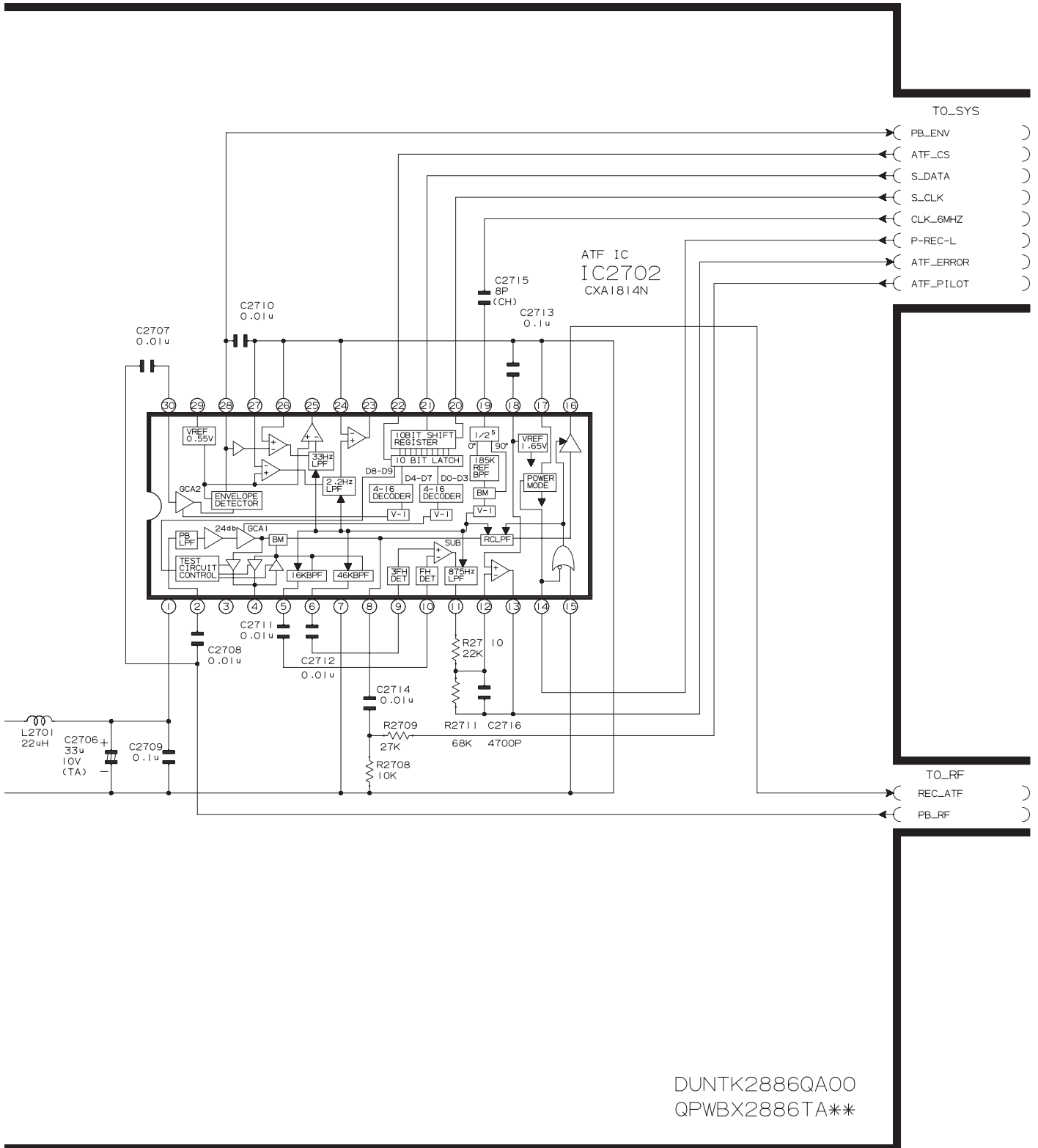


LOCATION MAP: (4/4)



8-9. SERVO CIRCUIT SCHEMATIC DIAGRAM



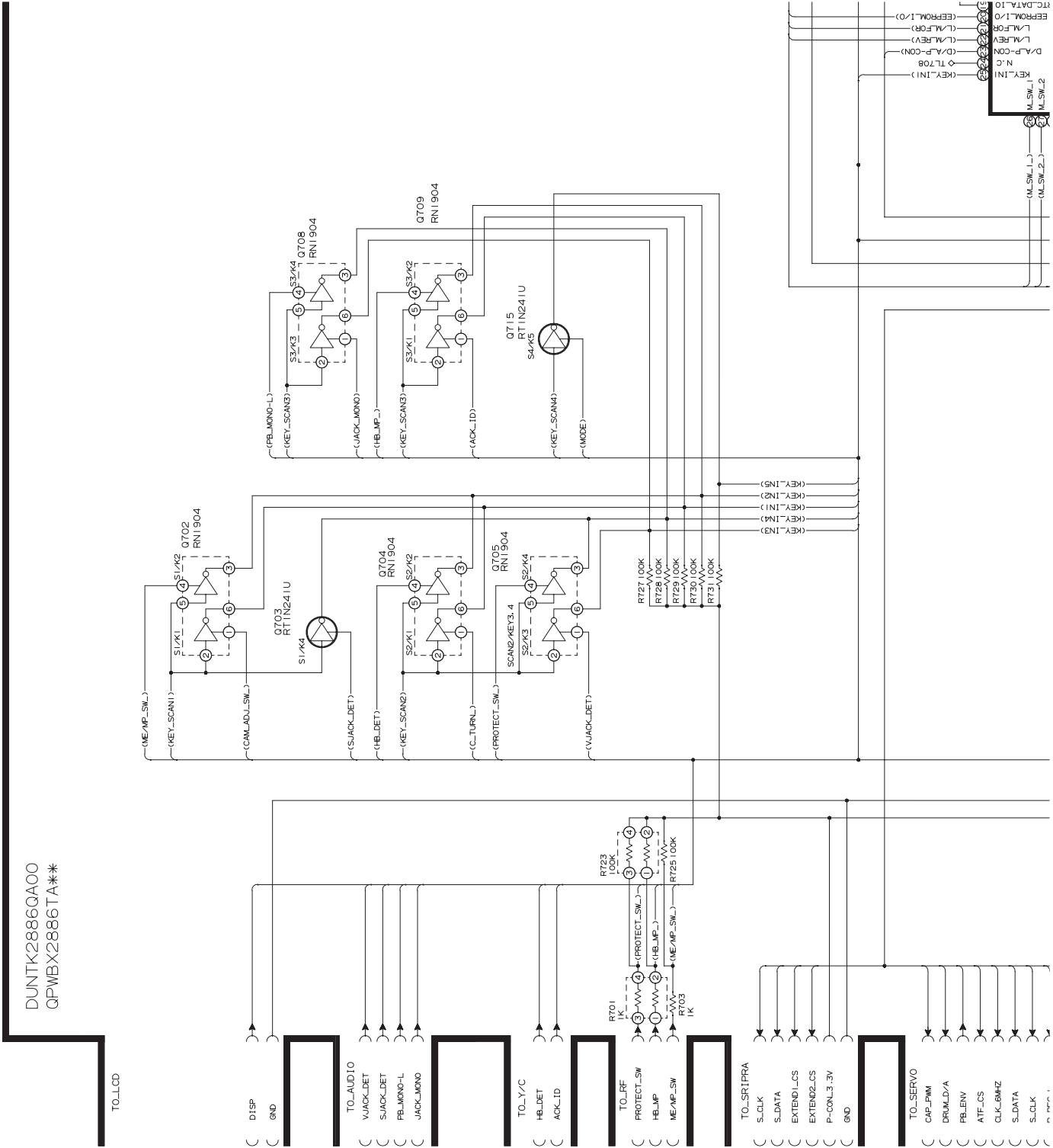


8-10. SYSTEM CONTROL CIRCUIT SCHEMATIC DIAGRAM

LOCATION MAP:

3
2 4

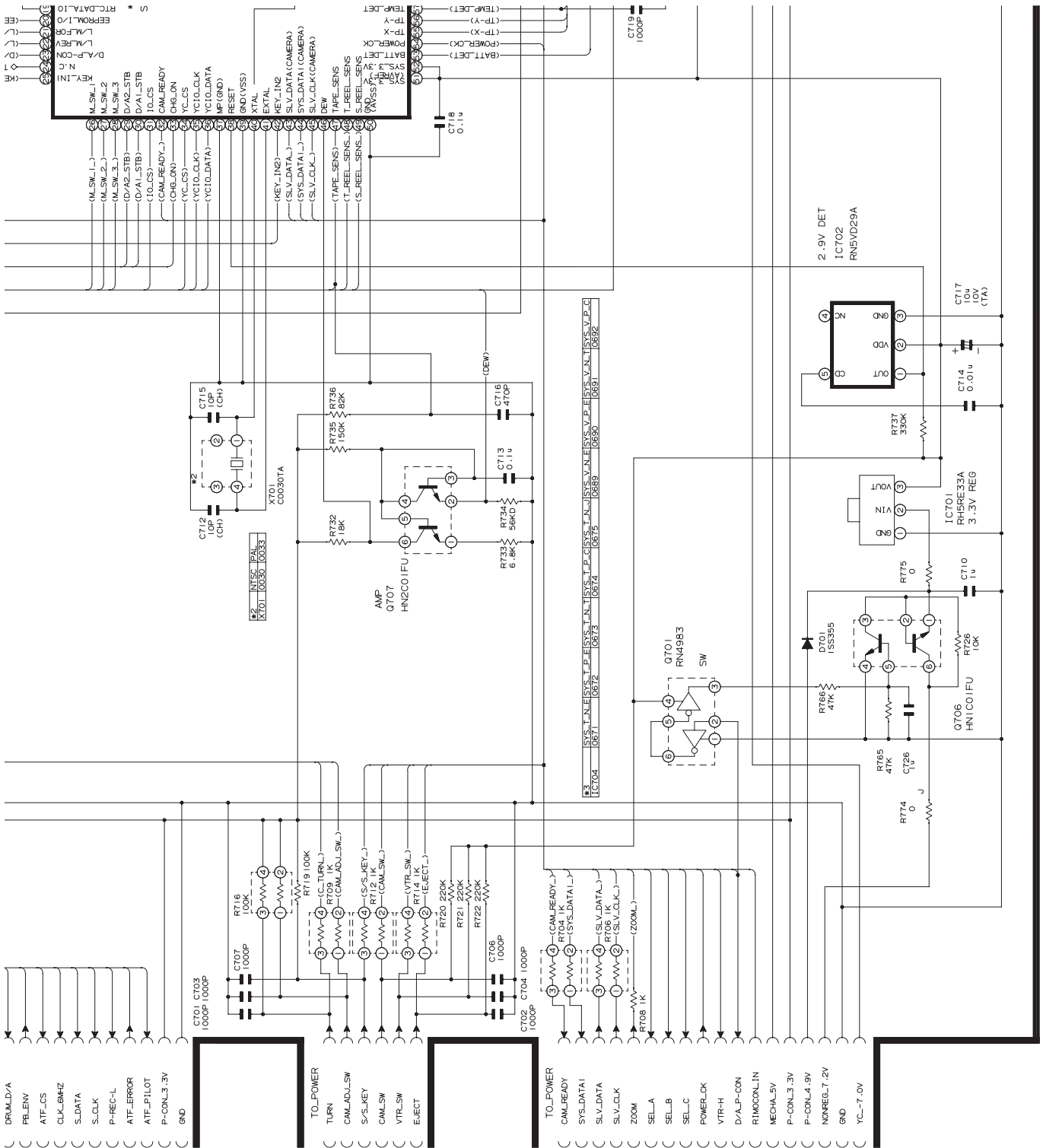
 (1/4)




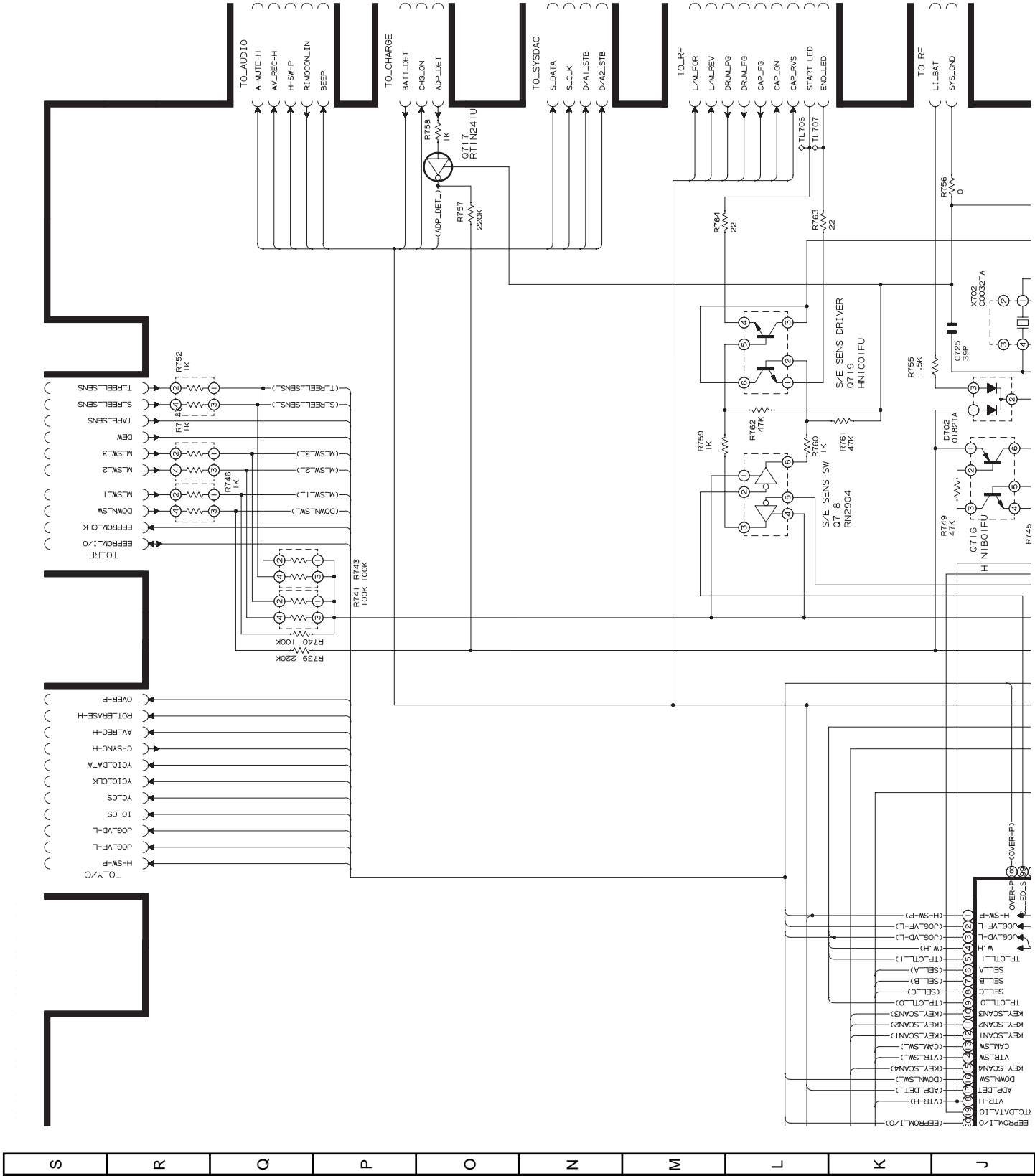
LOCATION MAP:

1	3	4
---	---	---

 (2/4)



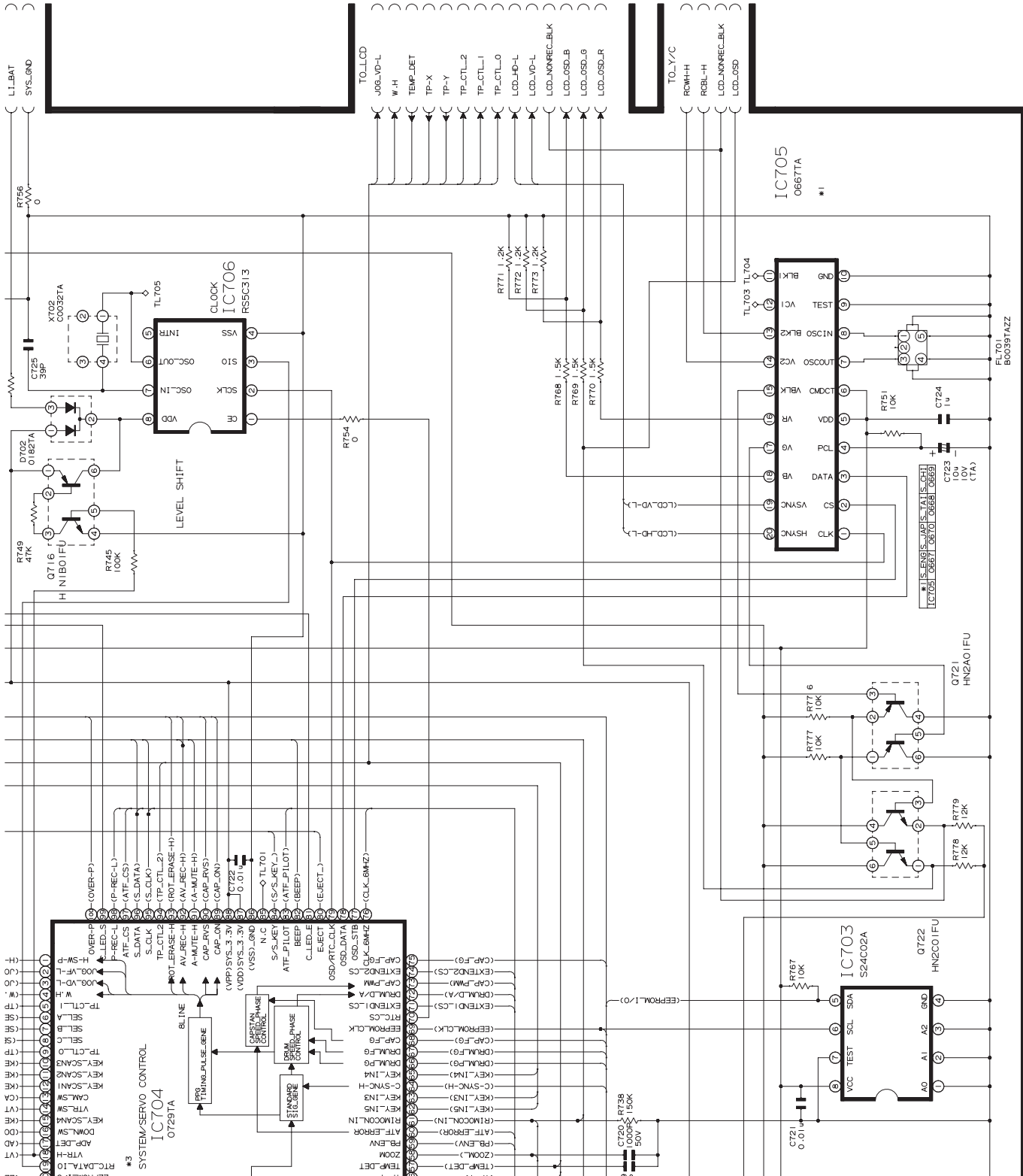
LOCATION MAP:  (3/4)



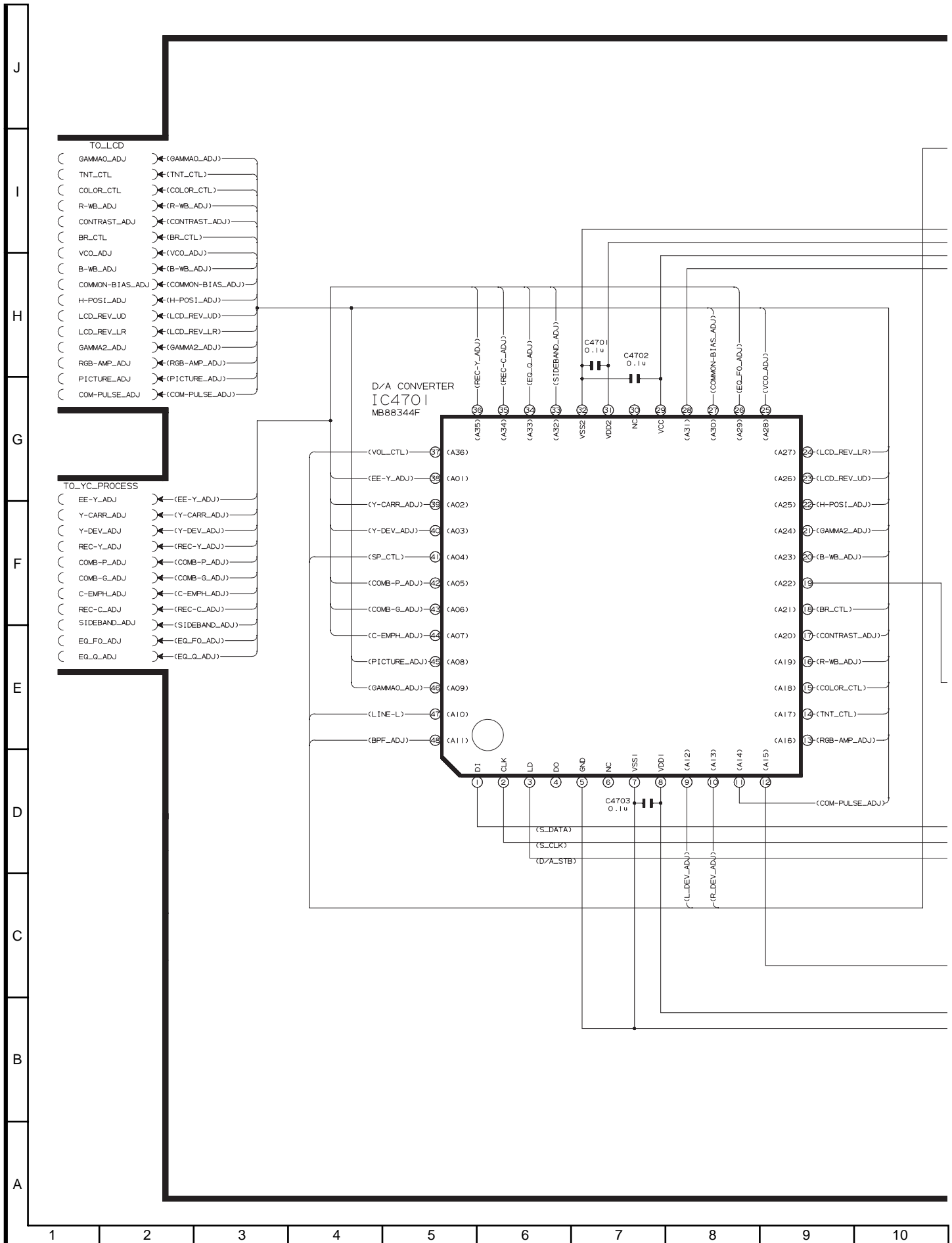
LOCATION MAP:

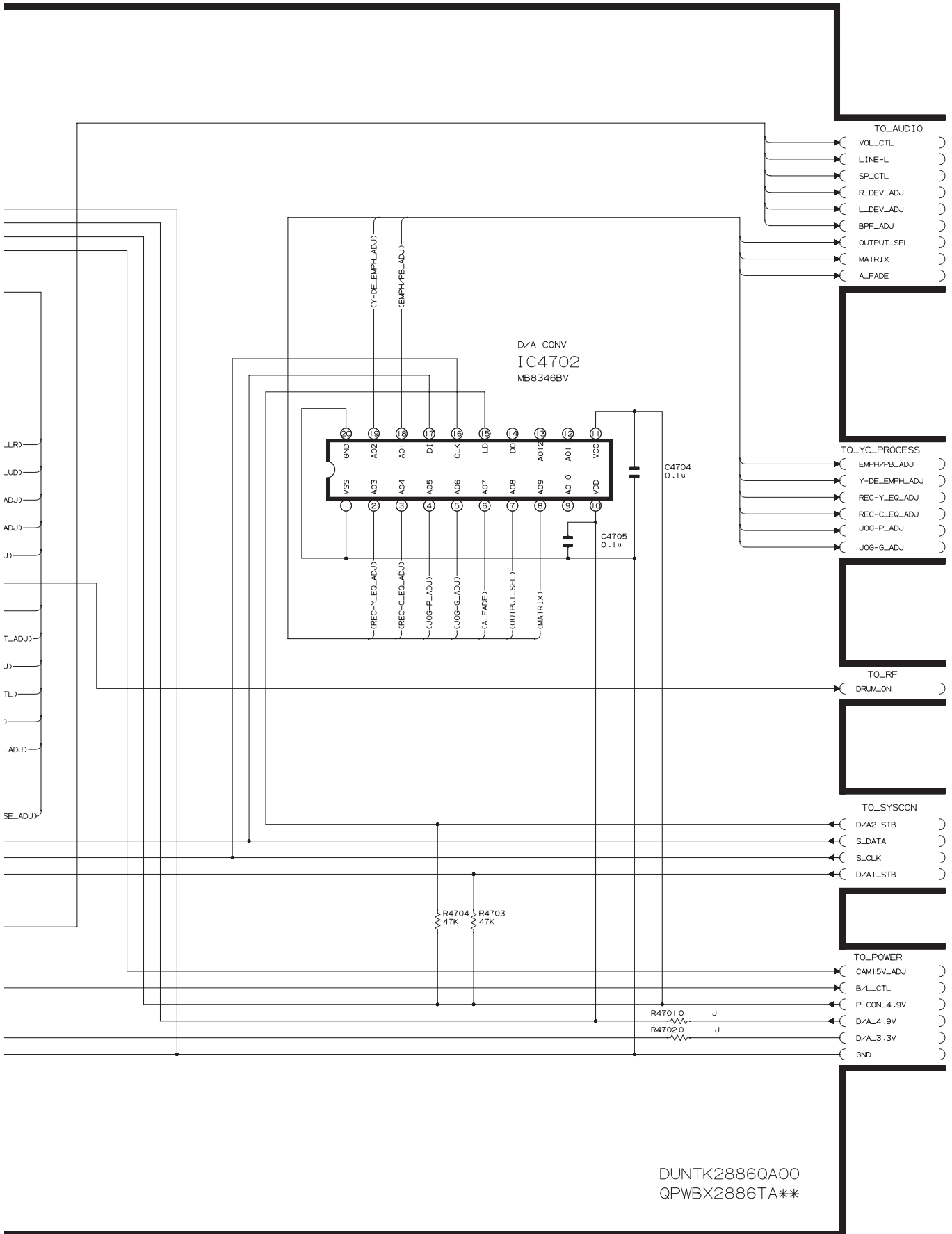
1	3
2	

 (4/4)

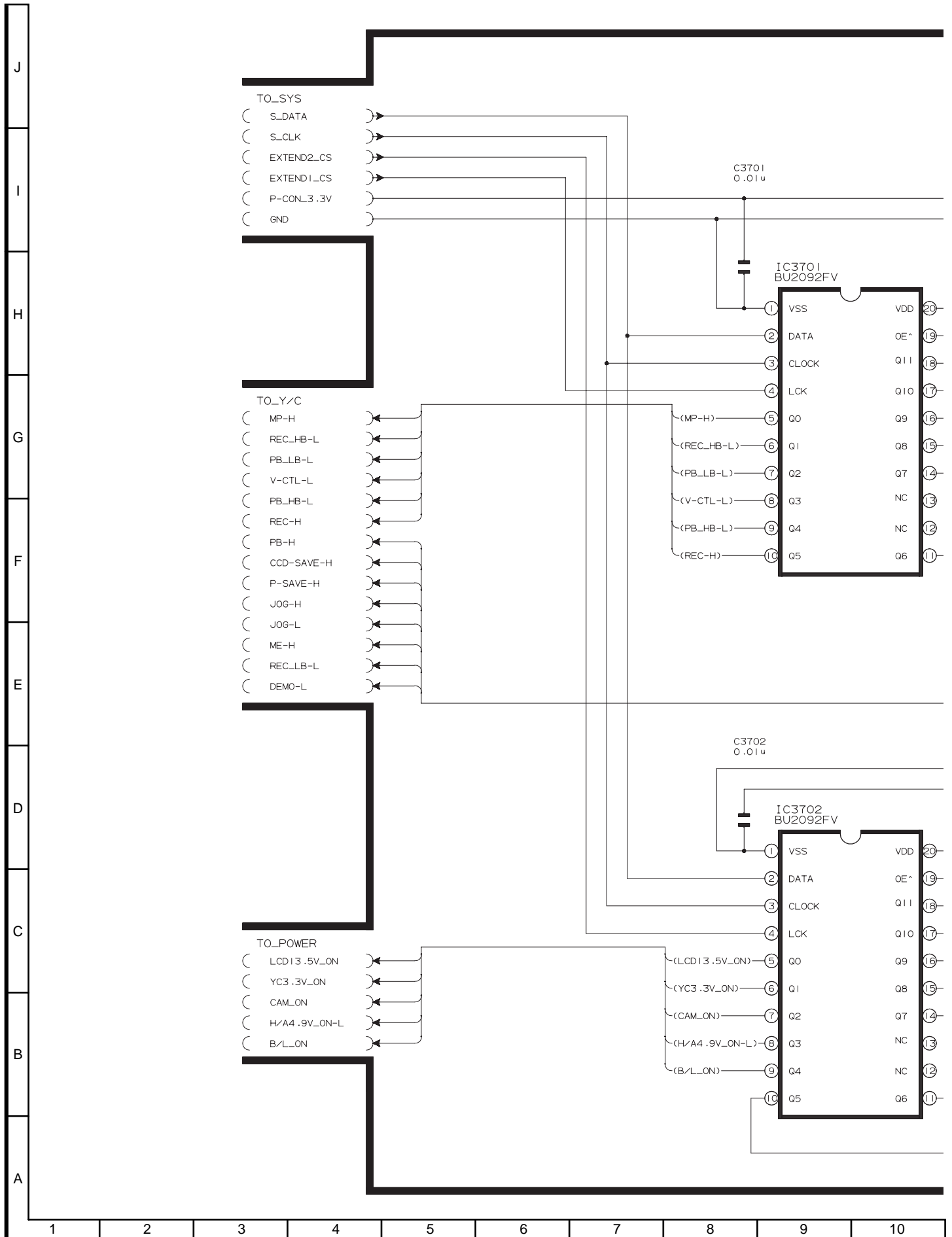


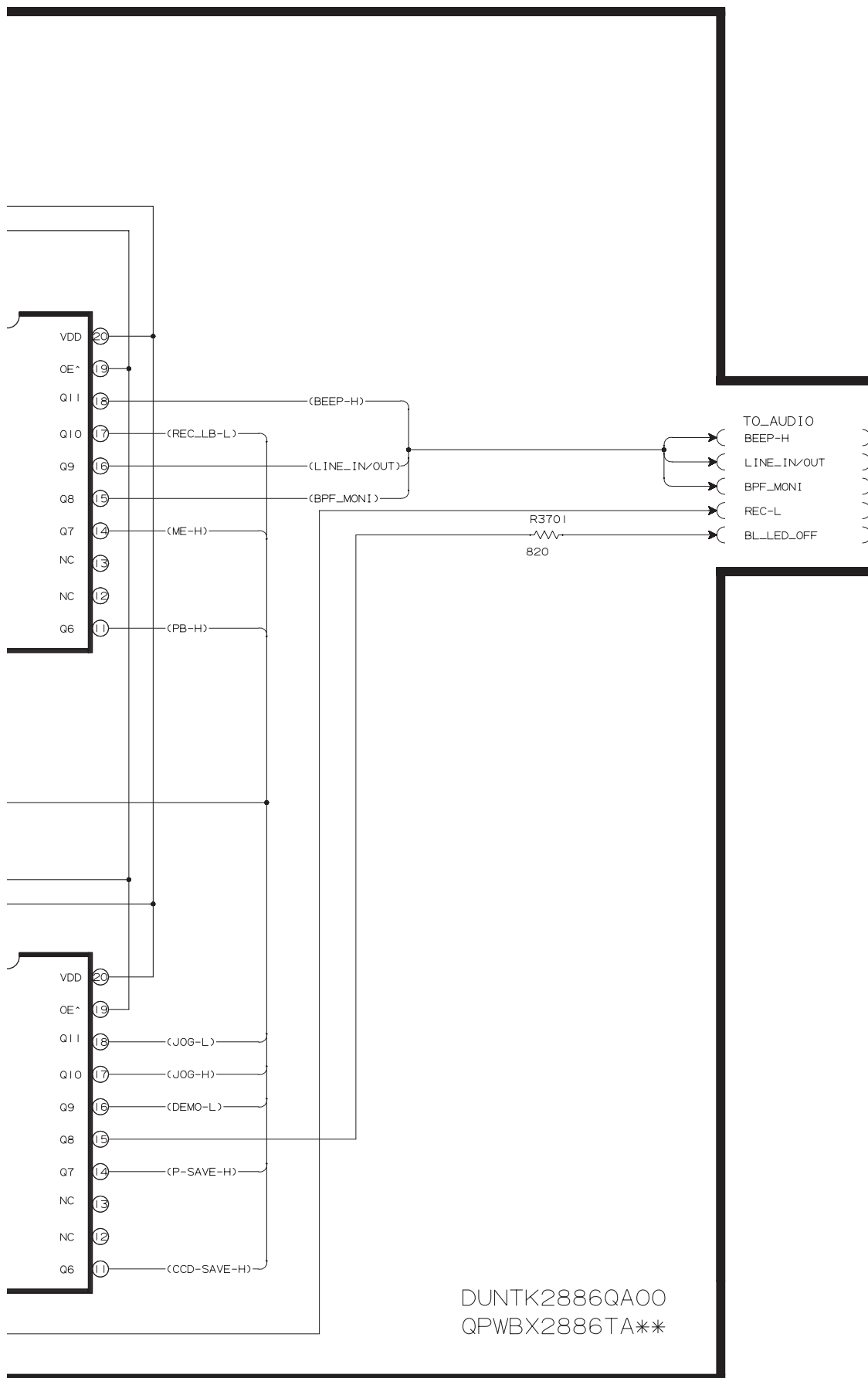
8-11. SYSTEM D/A CONVERTER CIRCUIT SCHEMATIC DIAGRAM





8-12. SRIPRA CIRCUIT SCHEMATIC DIAGRAM





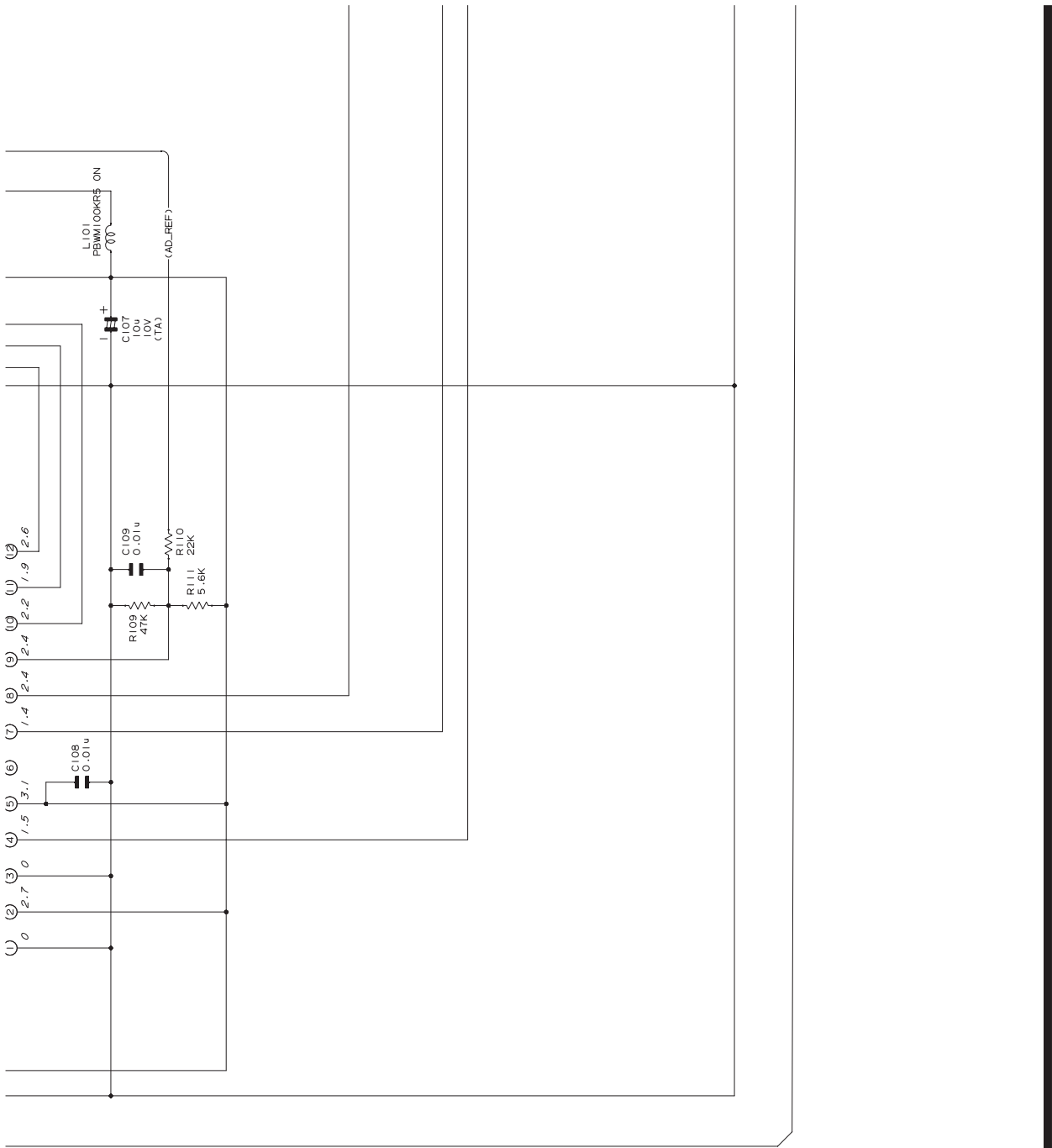
3	4
	2

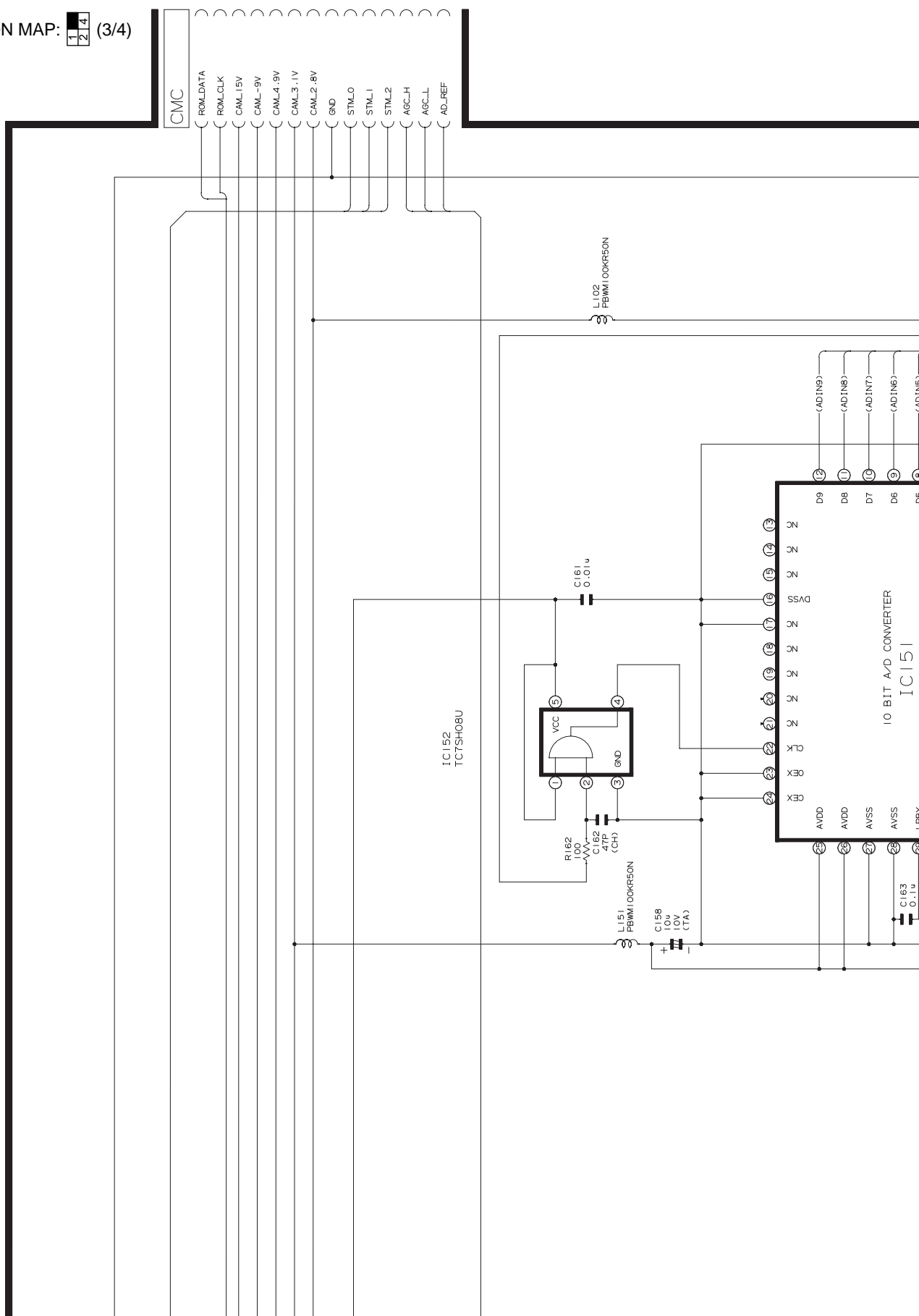


LOCATION MAP:

1	2	3	4
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 (2/4)



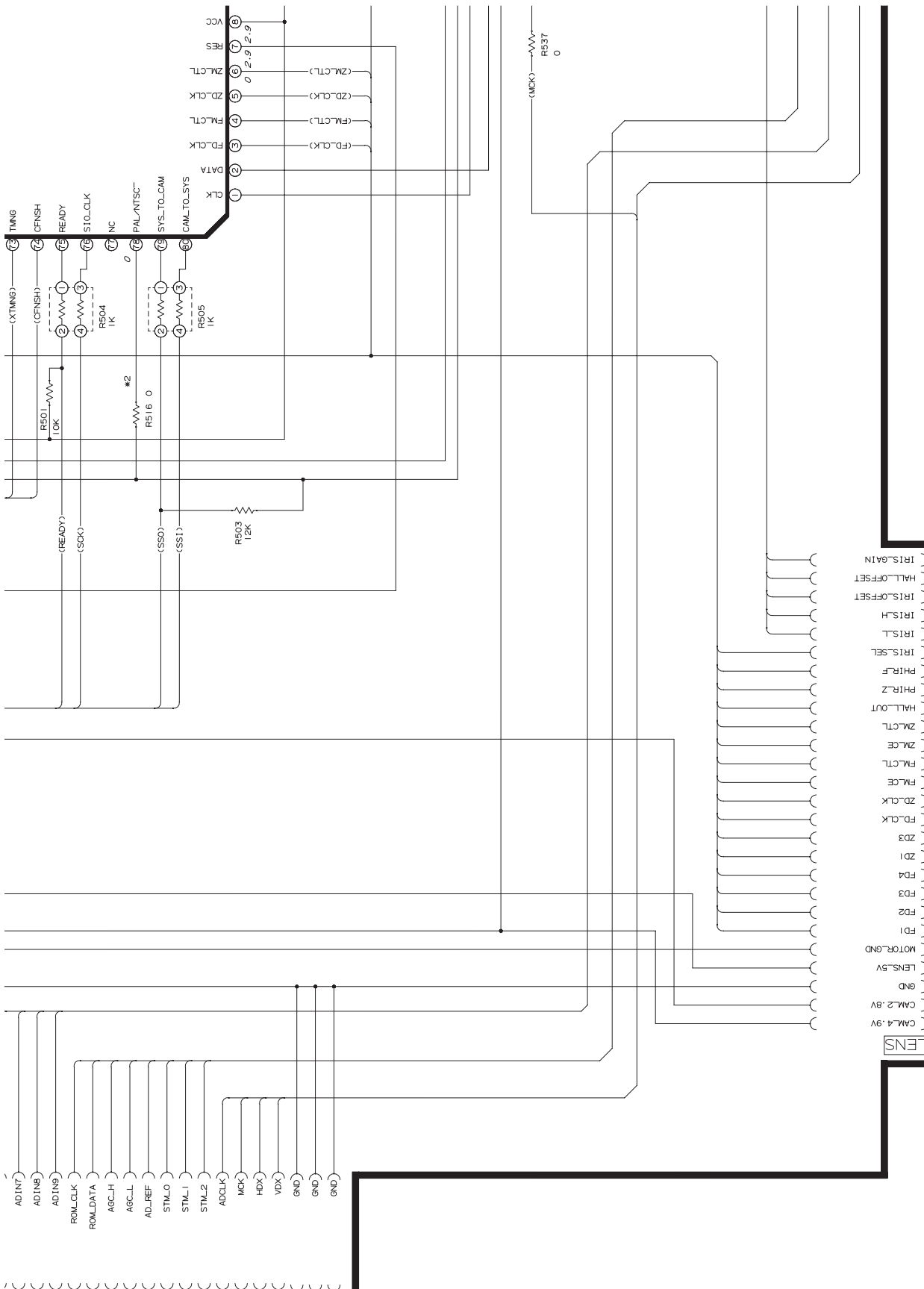




LOCATION MAP:

1	2	3	4
---	---	---	---

 (2/4)

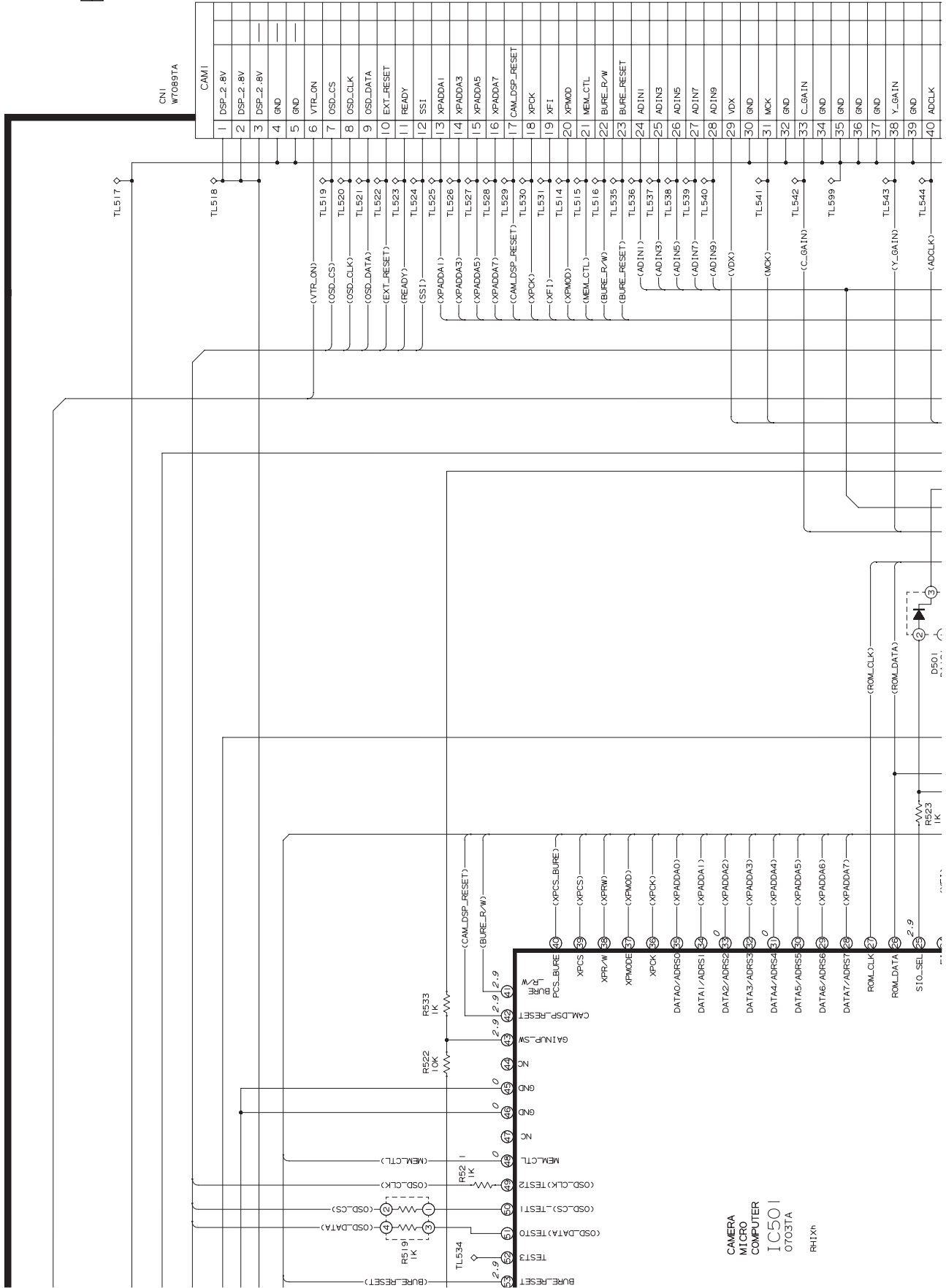


LOCATION MAP:

1	2	3	4
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 (3/4)

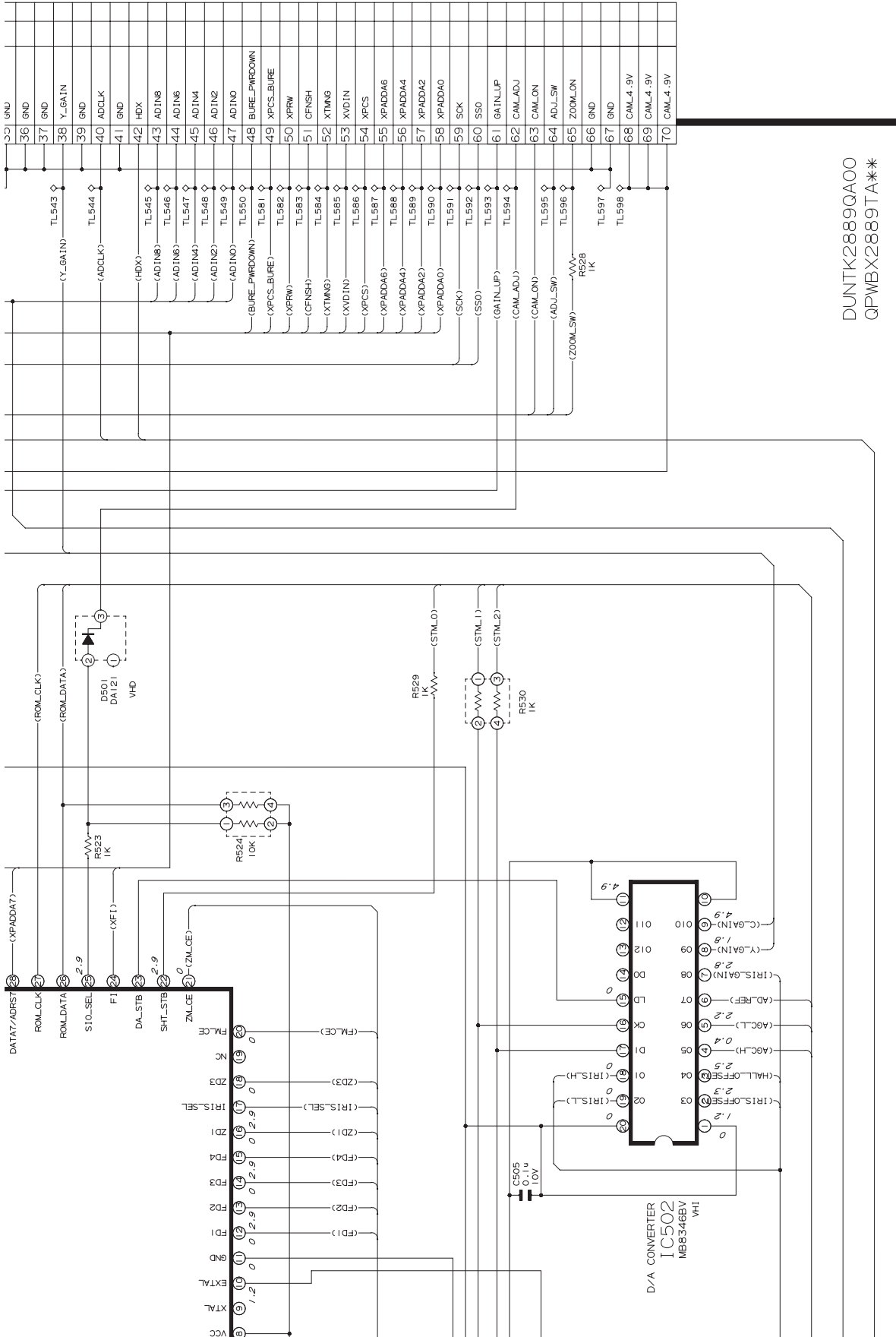
S R Q P O N M L K J



LOCATION MAP:

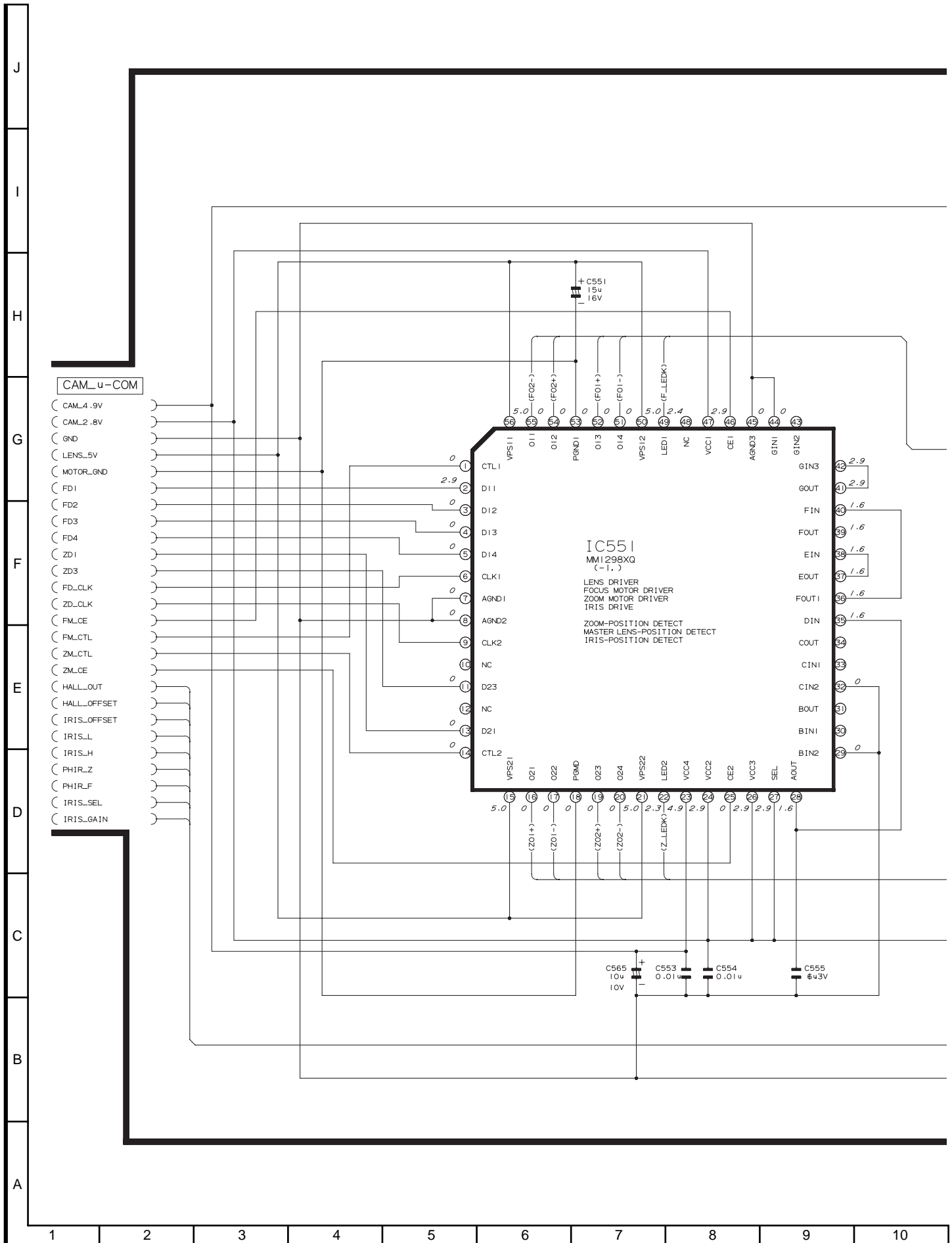
1	3
2	

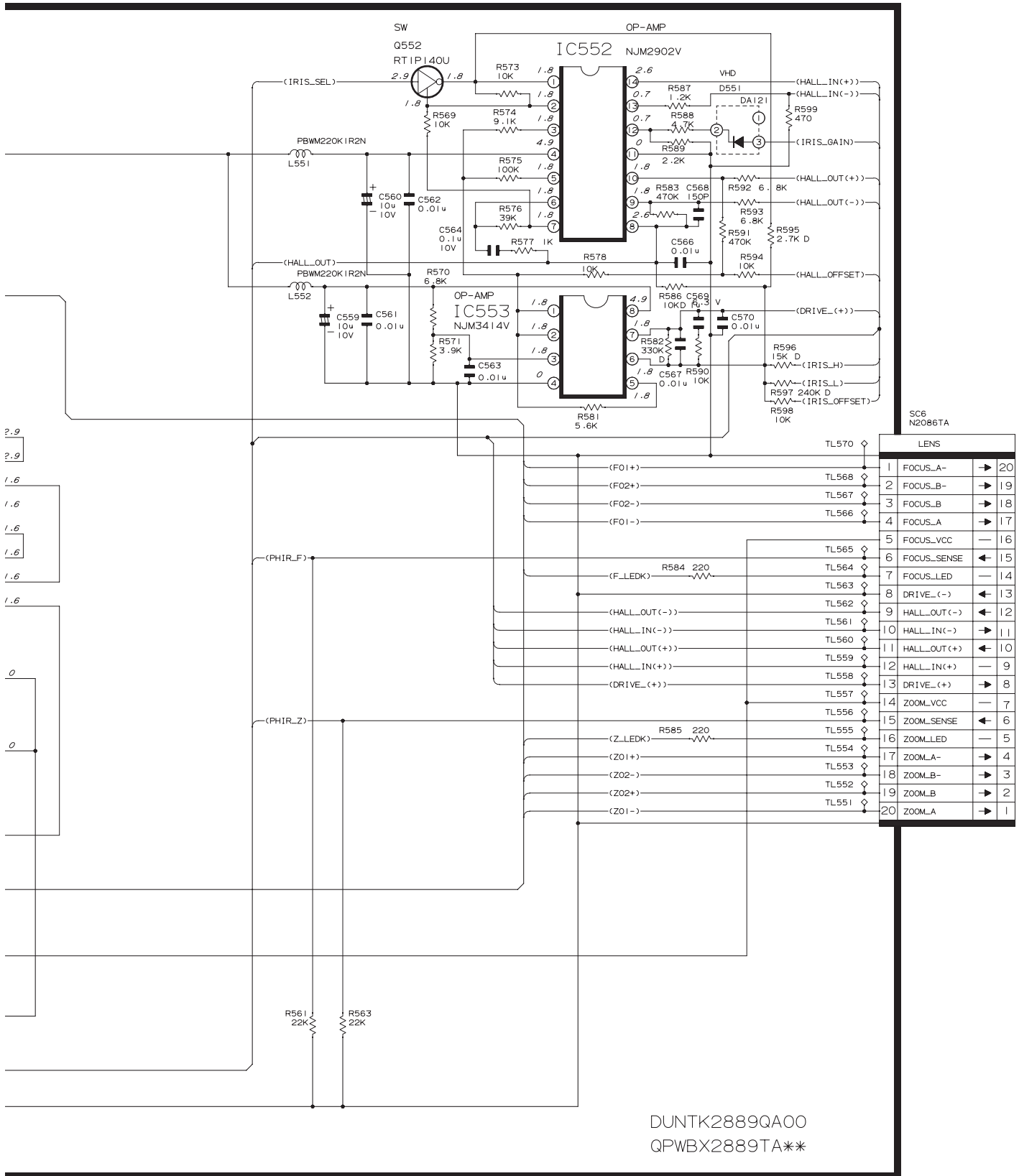
 (4/4)



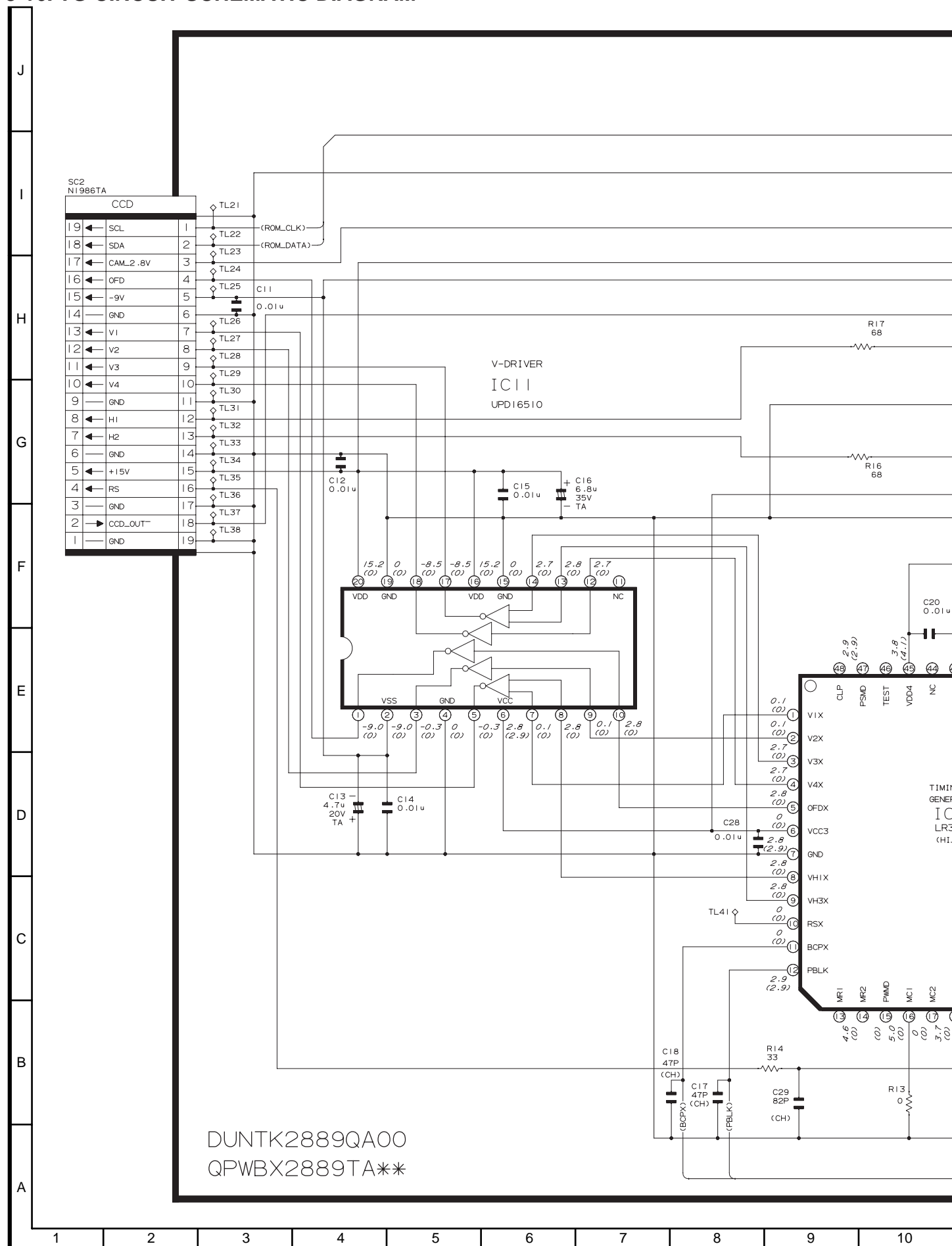
DUNTK2889QA00
QPWBX2889TA**

8-15. LENS DRIVE CIRCUIT SCHEMATIC DIAGRAM

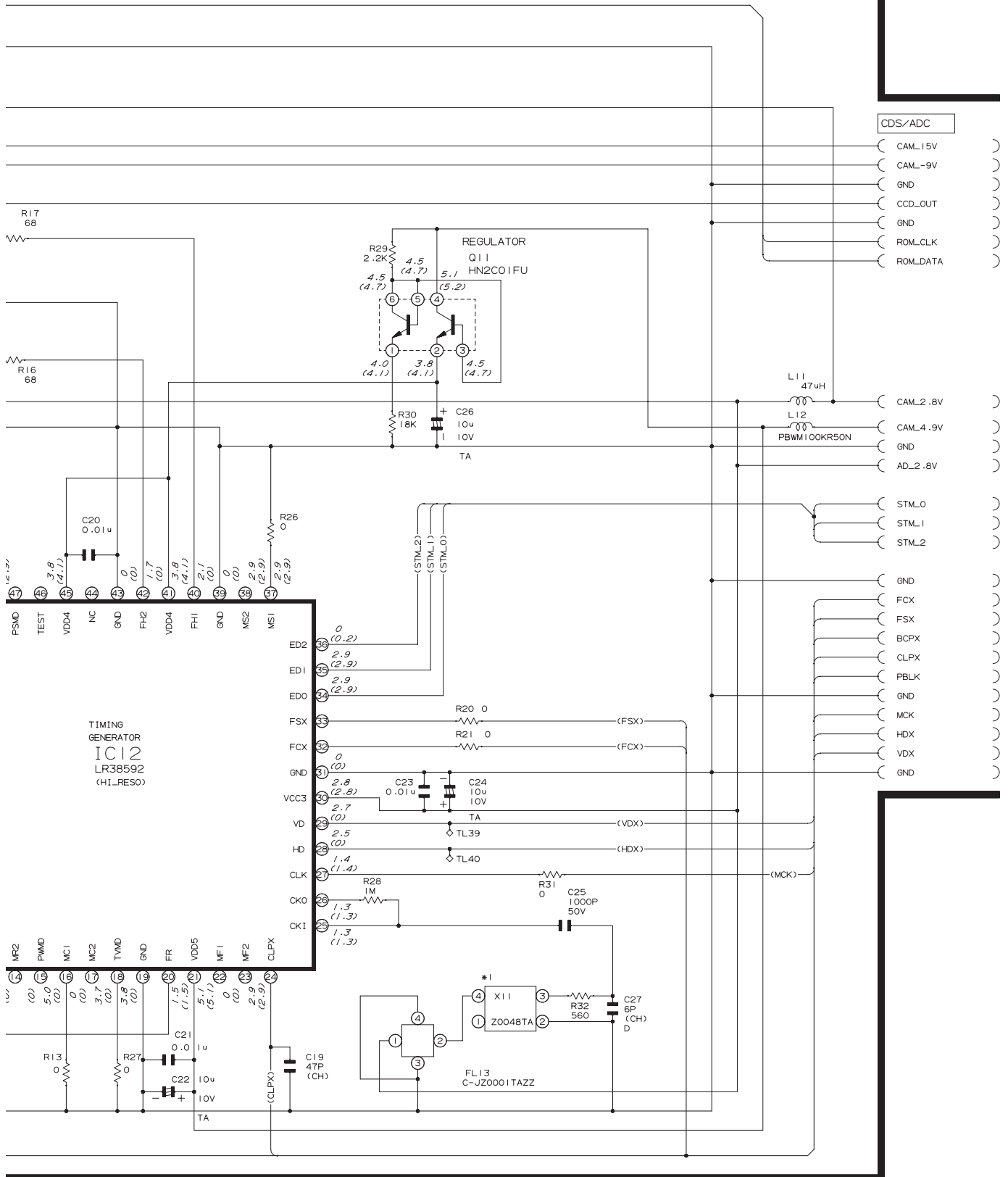




8-16. TG CIRCUIT SCHEMATIC DIAGRAM



REC
PB ()

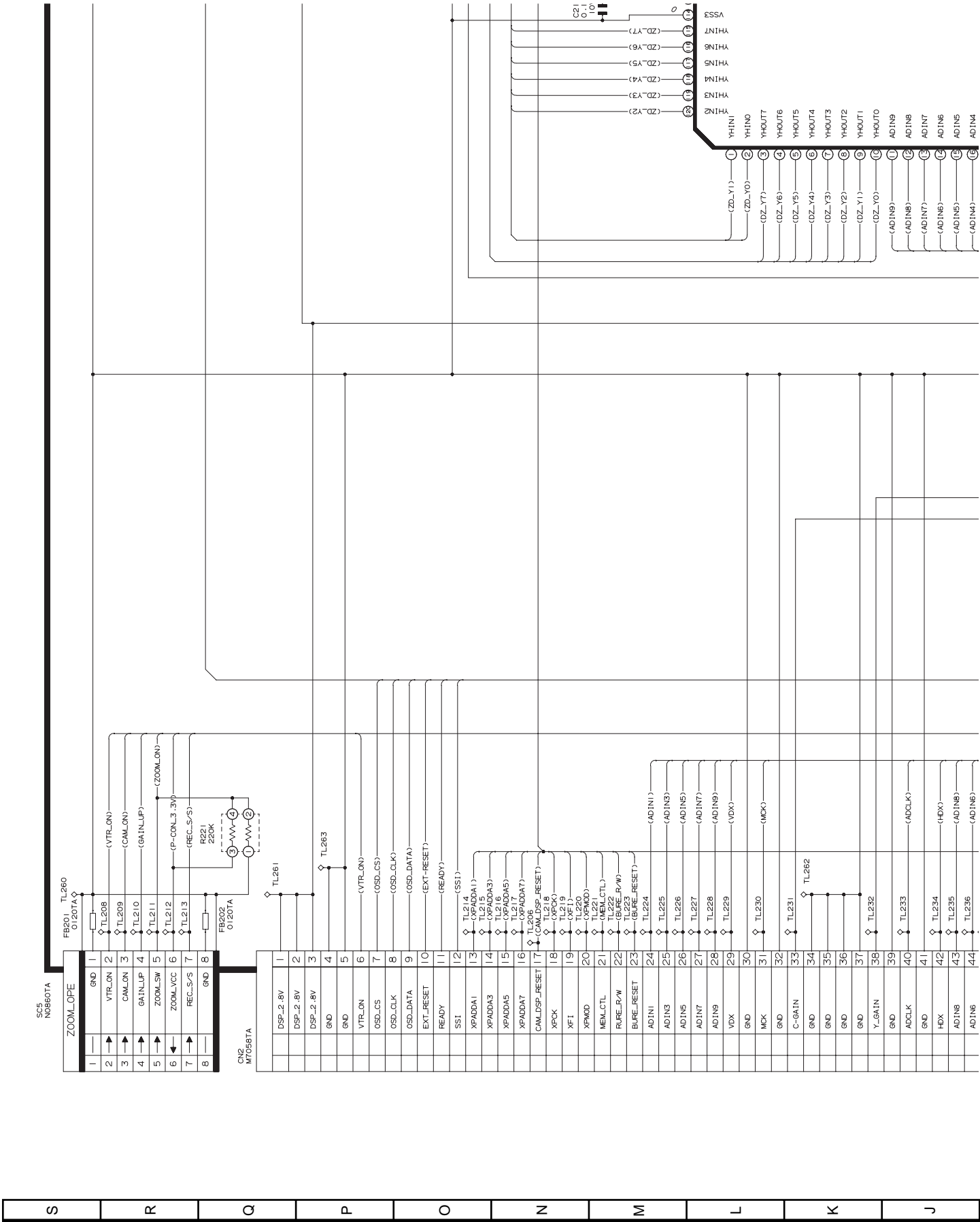


8-17. DSP CIRCUIT SCHEMATIC DIAGRAM

LOCATION MAP:

3
2
4

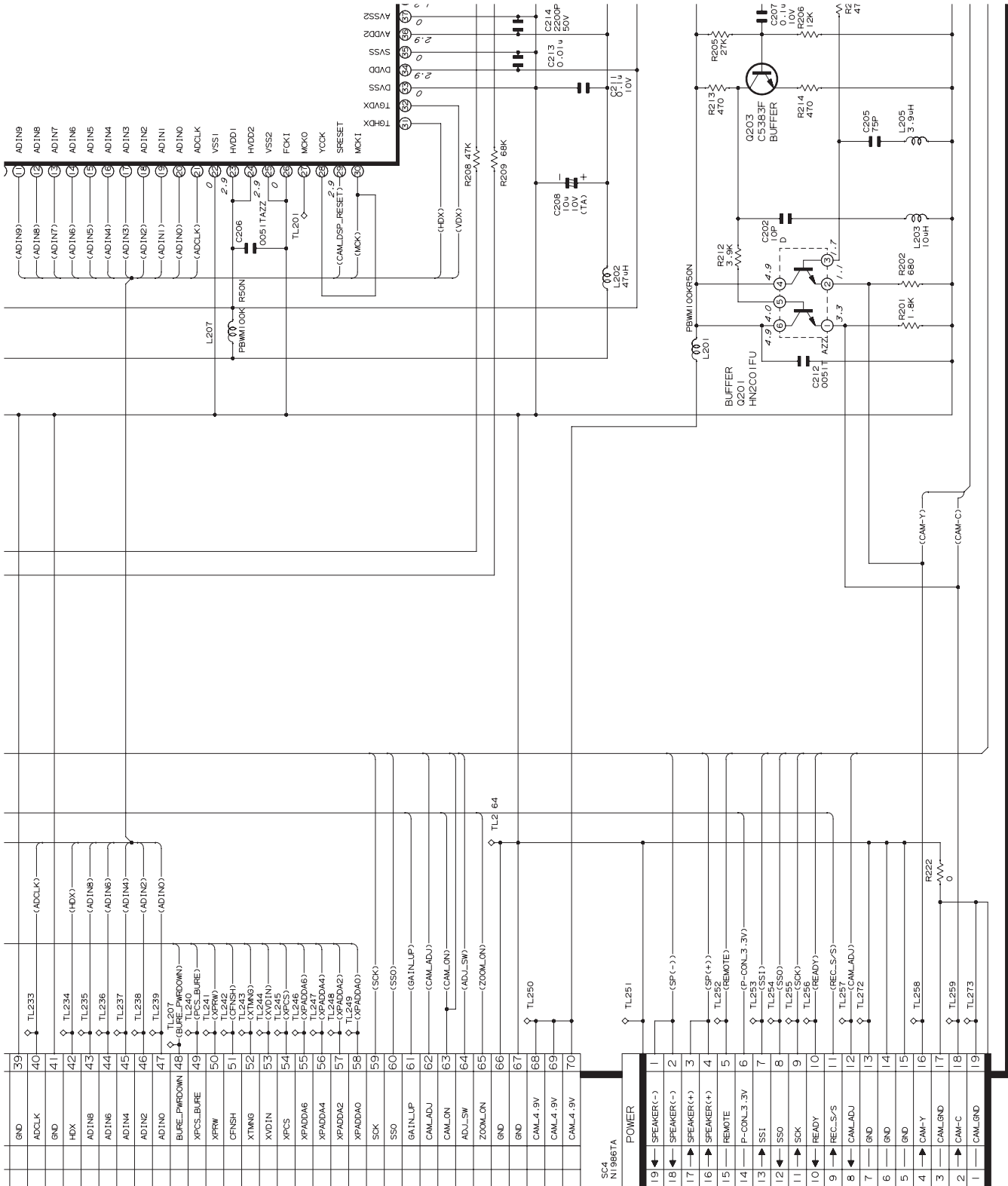
 (1/4)



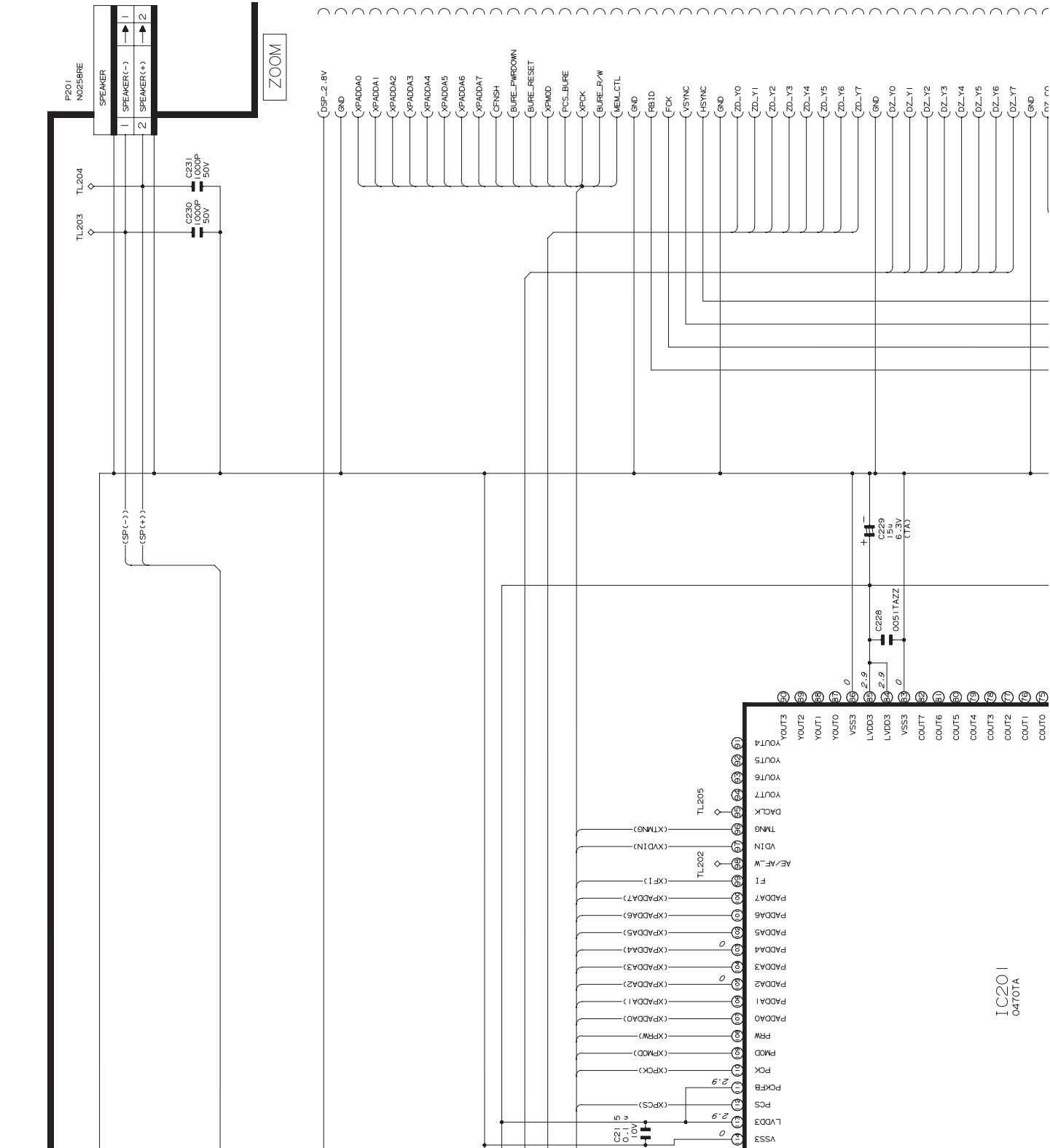
LOCATION MAP:

1	3	4
---	---	---

 (2/4)



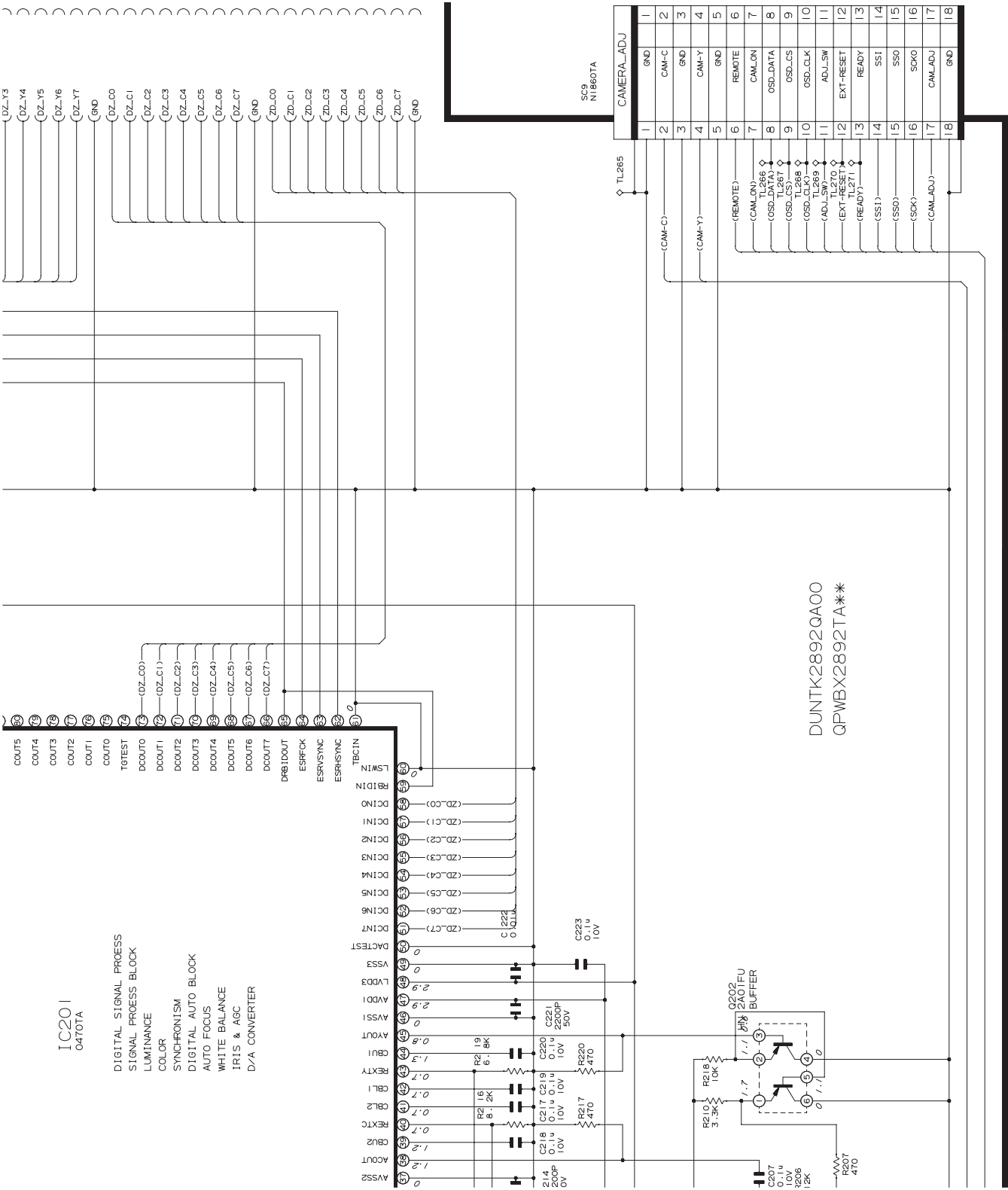
LOCATION MAP:  (3/4)



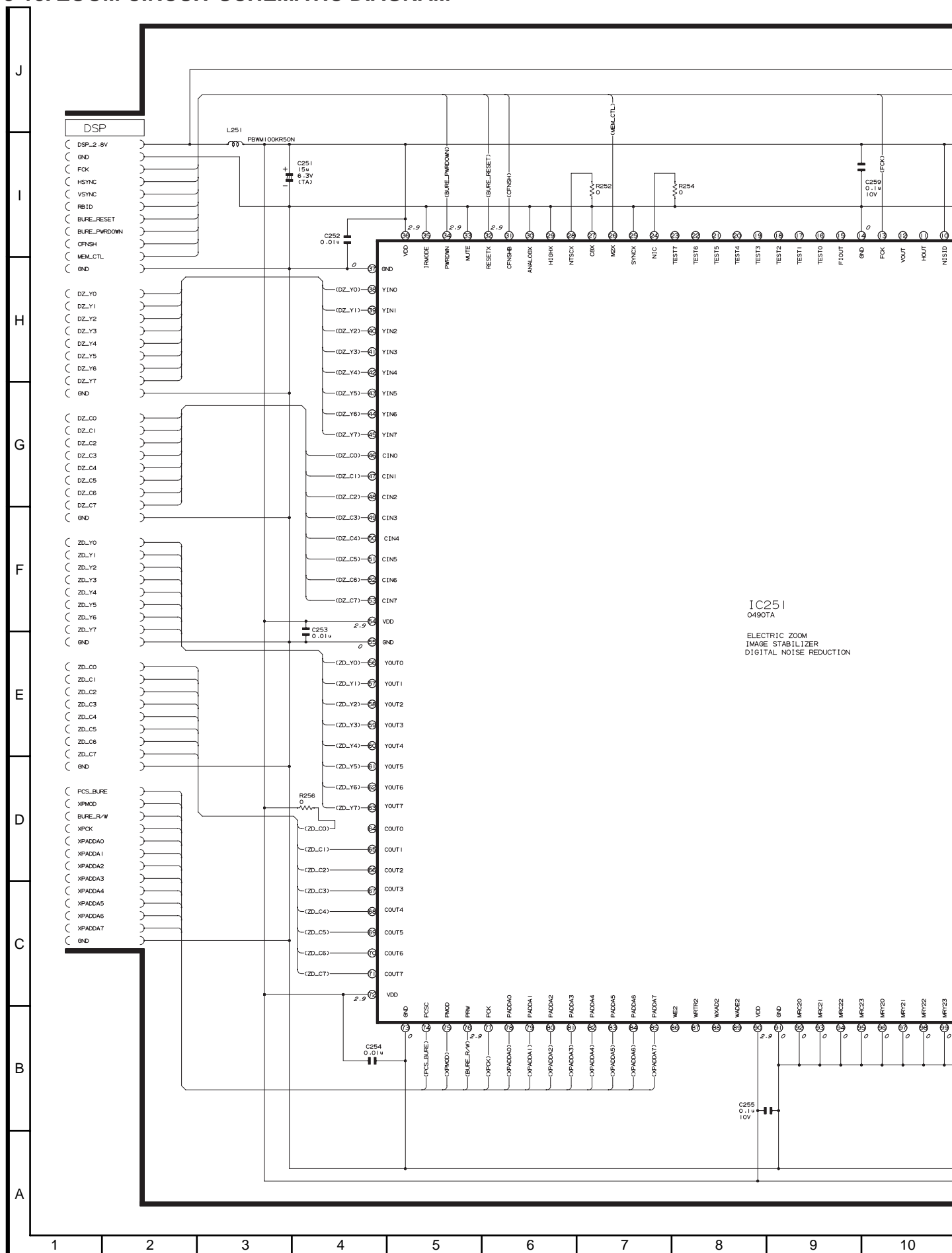
LOCATION MAP:

1	2	3
---	---	---

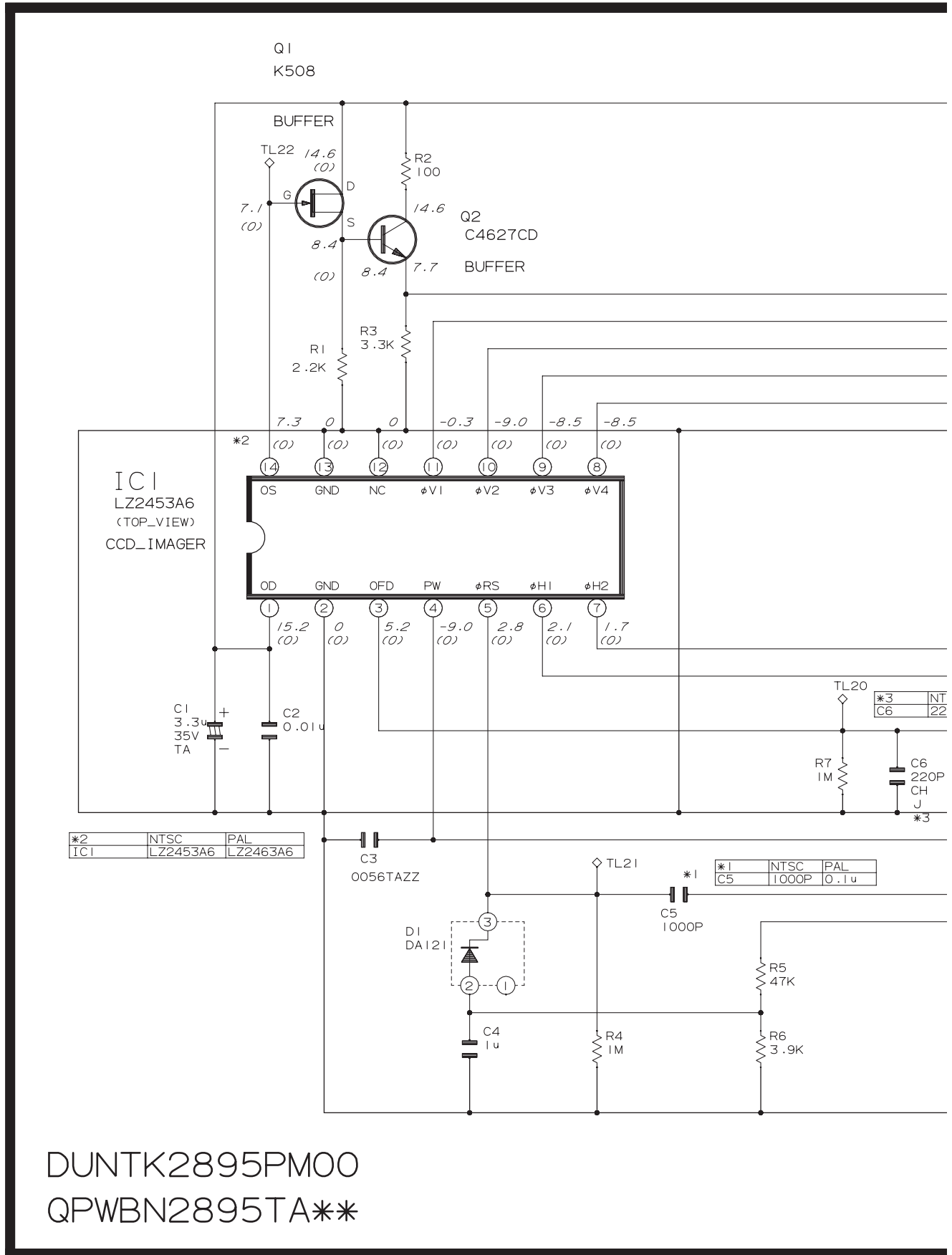
 (4/4)



8-18. ZOOM CIRCUIT SCHEMATIC DIAGRAM

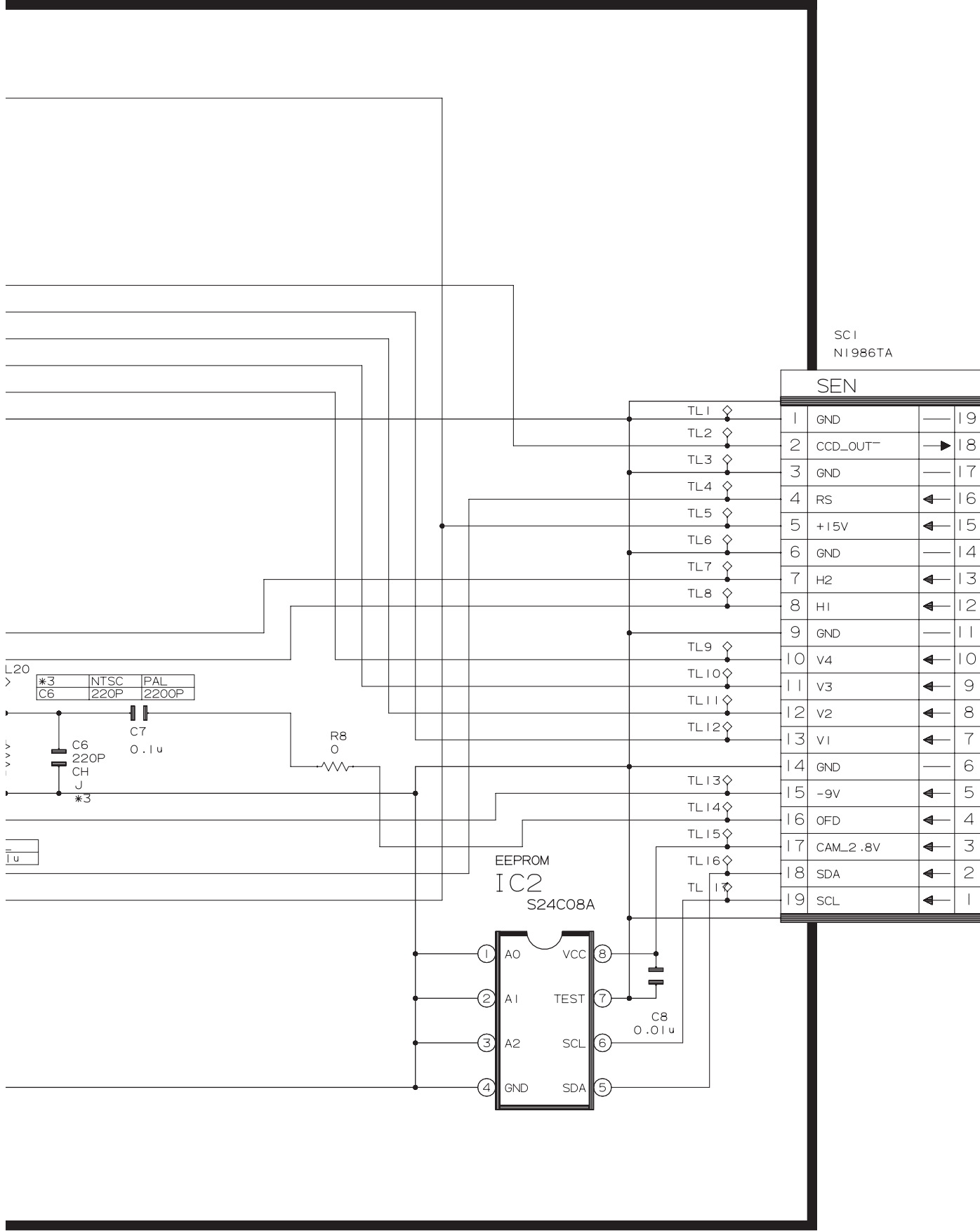


8-19. CCD CIRCUIT SCHEMATIC DIAGRAM

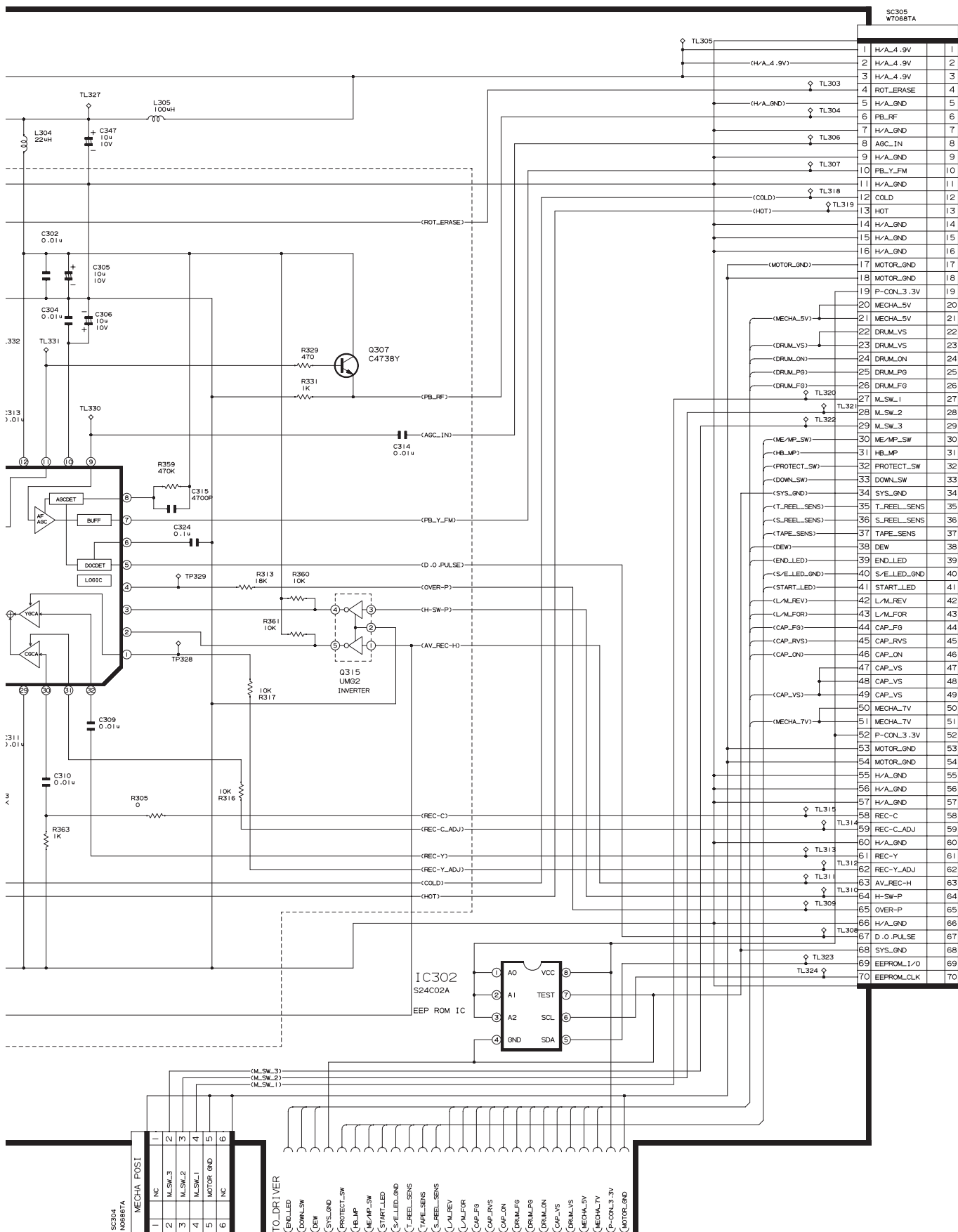


DUNTK2895PM00
QPWBN2895TA**

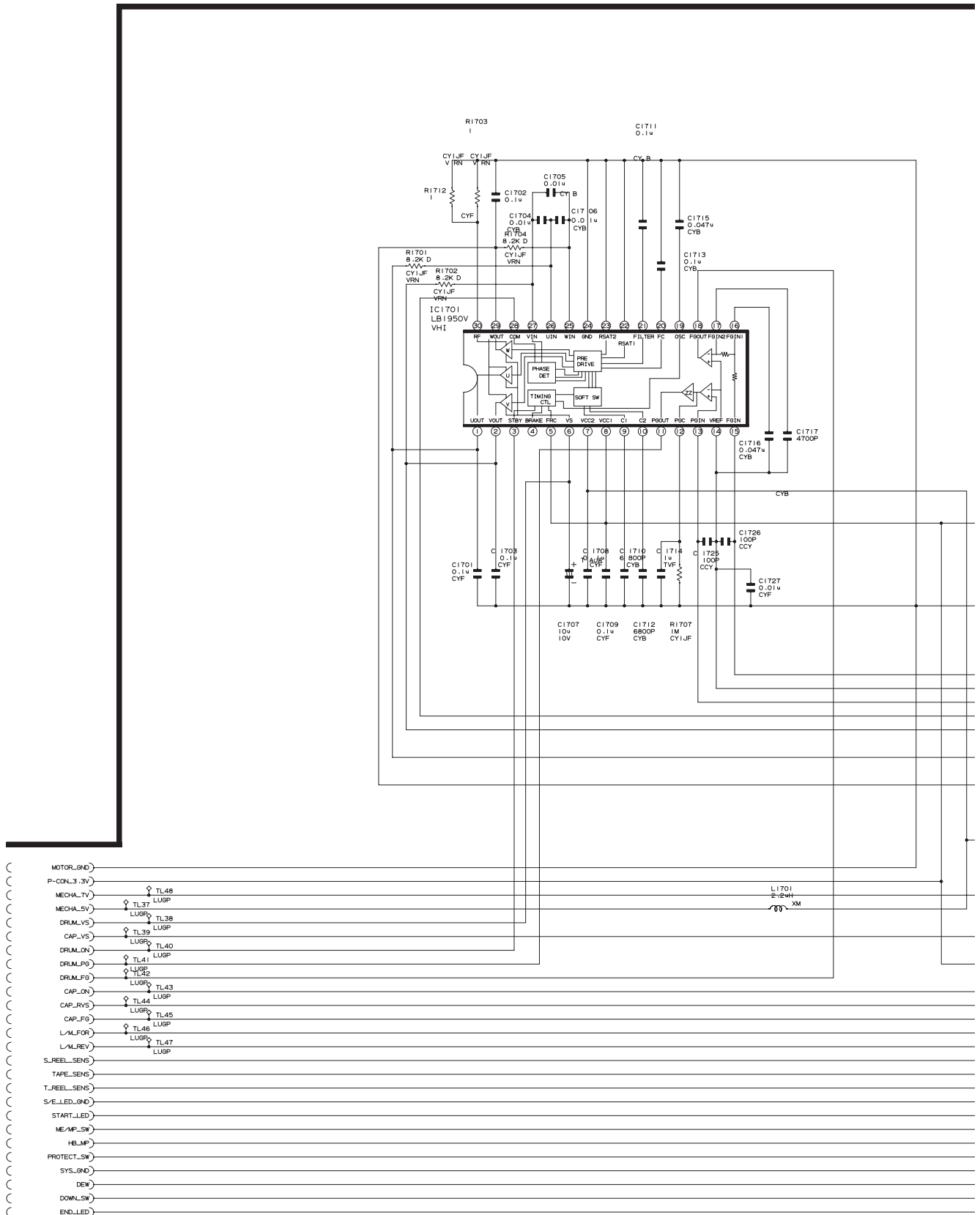
REC
PB()

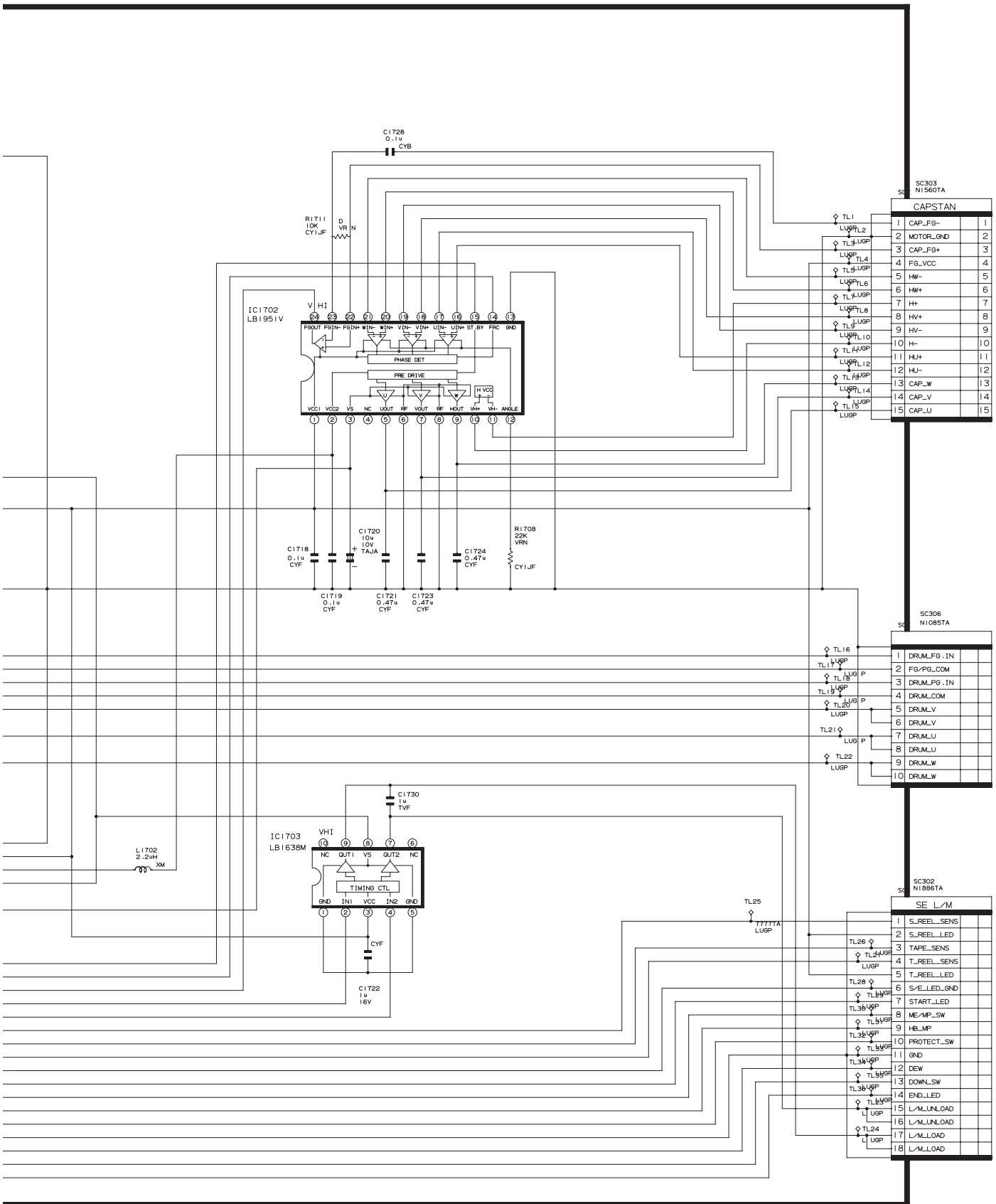




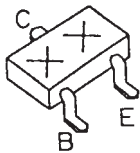


8-21. MOTOR DRIVE CIRCUIT SCHEMATIC DIAGRAM

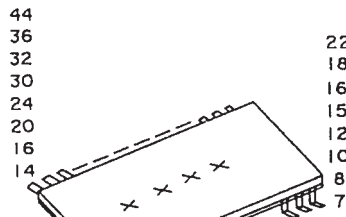




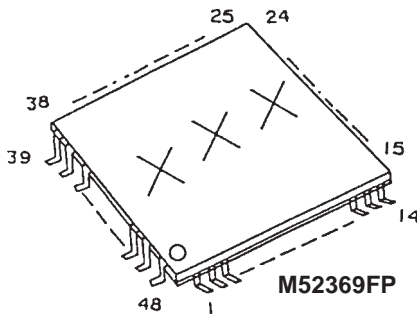
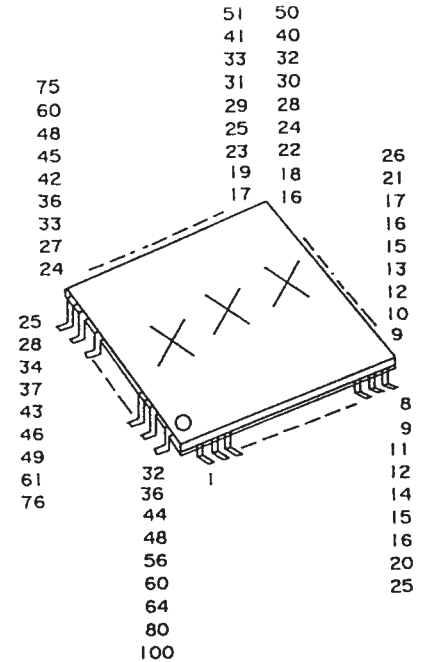
9. SEMICONDUCTOR LEAD IDENTIFICATION



2SA1298Y	DTC144EE	2SA1989R
2SA1774F	DTC323TK	2SC5383F
2SA1832Y	RN2104	2SC5384C
2SB12956	2SD1328-S	RT1P141U
2SC4555	2SA1037KQ	RT1P241U
2SC4738	DTA114EE	RT1P441U
2SC3931C	UN9213	RT1N141U
2SD2216	UN9113	RT1N241U
DTA144EE	DTC123EE	RT1N441U
2SC4627C	UN9110	RT1P140U
2SC4617B	DTA114TE	2SA1362GR



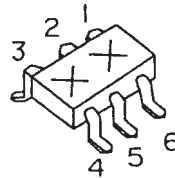
IX0238TA	MB8346BV	LB1882V
LB1951V	UPD16510	CXA1814N
M62352GP	LB1850V	NJM2902V
MC14053V	NJU4066V	BA7785FS
MB3775FV	LB1843V	BU2092FV
CXL5516N	MM1433	CXA2096N
M52374VP	MB3788FV	MS548331
IX0667TA	BU4051FV	LZ2453A6
AN3358SH		



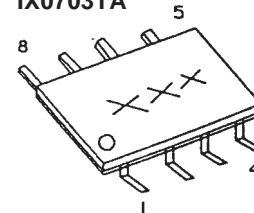
M52369FP



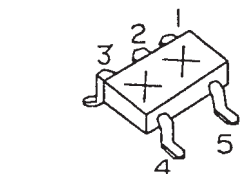
2SB1121T
2SB1132Q
2SB1302S
2SB1123T
SB20W03P
2SK2316



MB3785V	LZ95NA1	CXA2006Q
IX0437TA	LA7458W	MM1298XQ
IR3Y29AM	IX0452TA	CXA2503A
IX0470TA	BA9732KV	CXA2083R
IX0490TA	LR38590	CXA2085R
IX0589TA	LA7471M	CXA1737R
MB3825A	MB88344F	ADS933Y
IX0671TA	CXD2310A	CXA2032Q
IX0703TA		

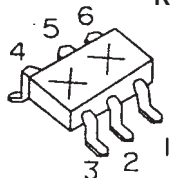


BA7655AF	S24C02A	TC7W08U
ST93C46T	S24C08A	NJM2233V
NJM4565V	NJM4558M	NJM4565V
NJM3414V	NJM2904M	CXA1211N
RS5C313	RM3329B	TC4W66U

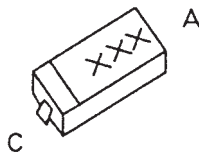


UMG2	XP1C301
S8435CF	XP1401
XP1501	2SA1873Y
NJM2107F	2SC4944Y
SC14S66F	RN2702
SC7S08F	RN2703
UMC5	RN2704
XP1B301	RN1702
	RN1703
	RN1704

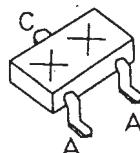
UMD2	HN2C01FU	XP4601
UMT2	RN4982	XP6501
UMX2	RN4983	UMH2
UMZ1	RN4984	UPUMZ1
XP4111	RN4990	RN2904
HN1B01FU	RN2902	RN1902
HN1A01FU	RN2903	RN1903
HN2A01FU	XP4113	RN1904
HN1C01FU	XP4213	



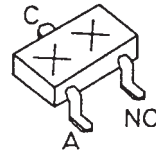
RN4604
XN4402
XN4504
XN6401



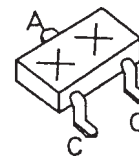
SFPB54
HVV17TRF
EX0870CE
HVV359TR



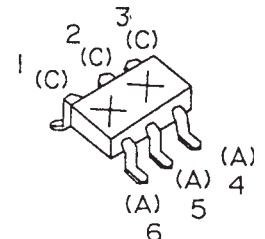
DAN222
MA132WK



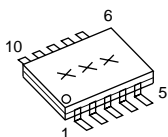
DA121
MA132K
EX0152TA



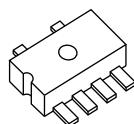
MA132WA
DX0182TA



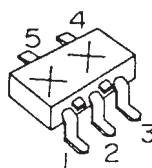
FC903
IMN10



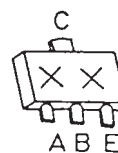
LB1683M



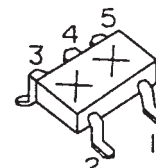
FX803



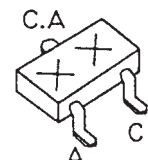
FP301



MPL1



FMY1

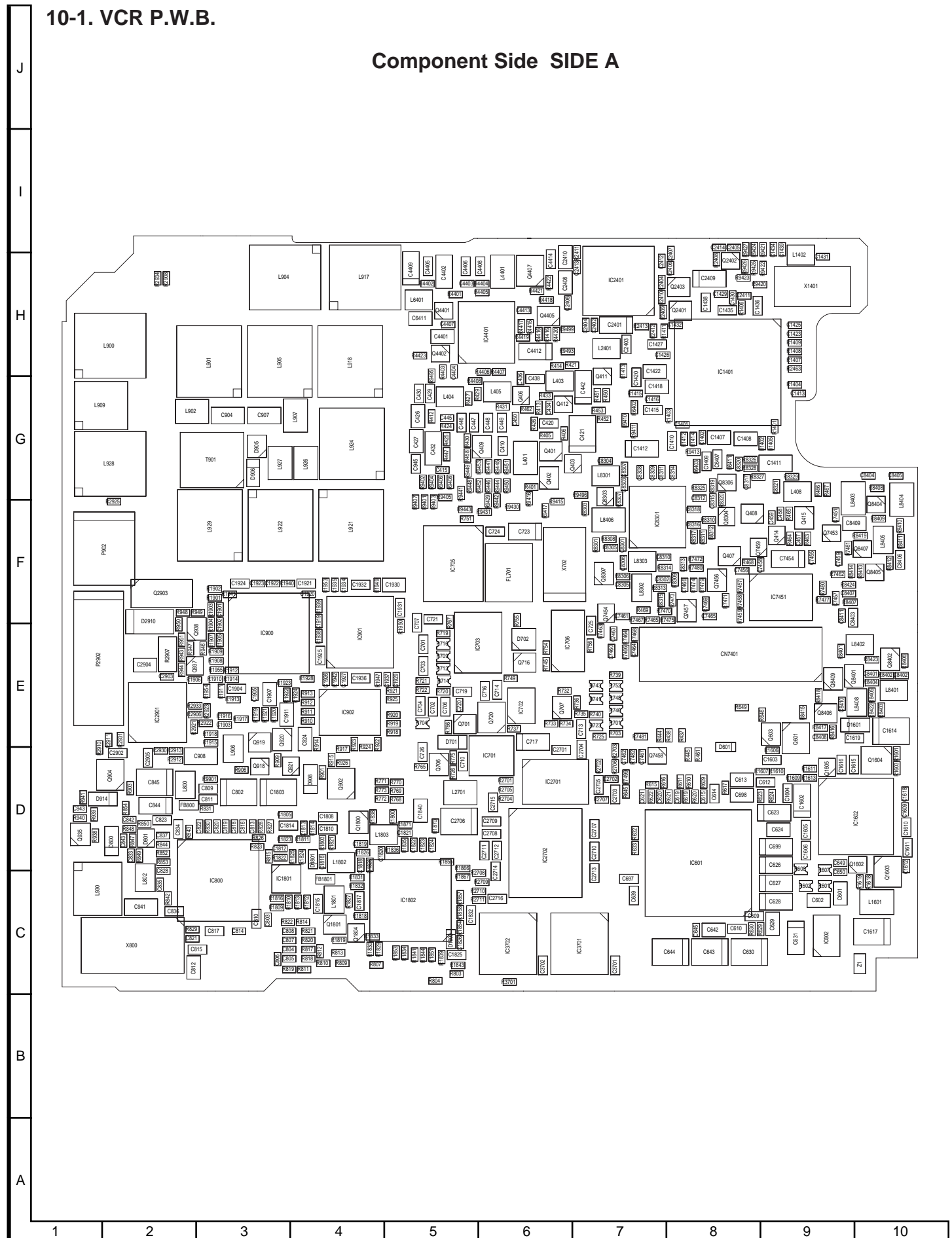


MA133
MA147

10. PRINTED WIRING BOARD ASSEMBLIES

10-1. VCR P.W.B.

Component Side SIDE A



Wiring Side SIDE A

J

I

H

G

F

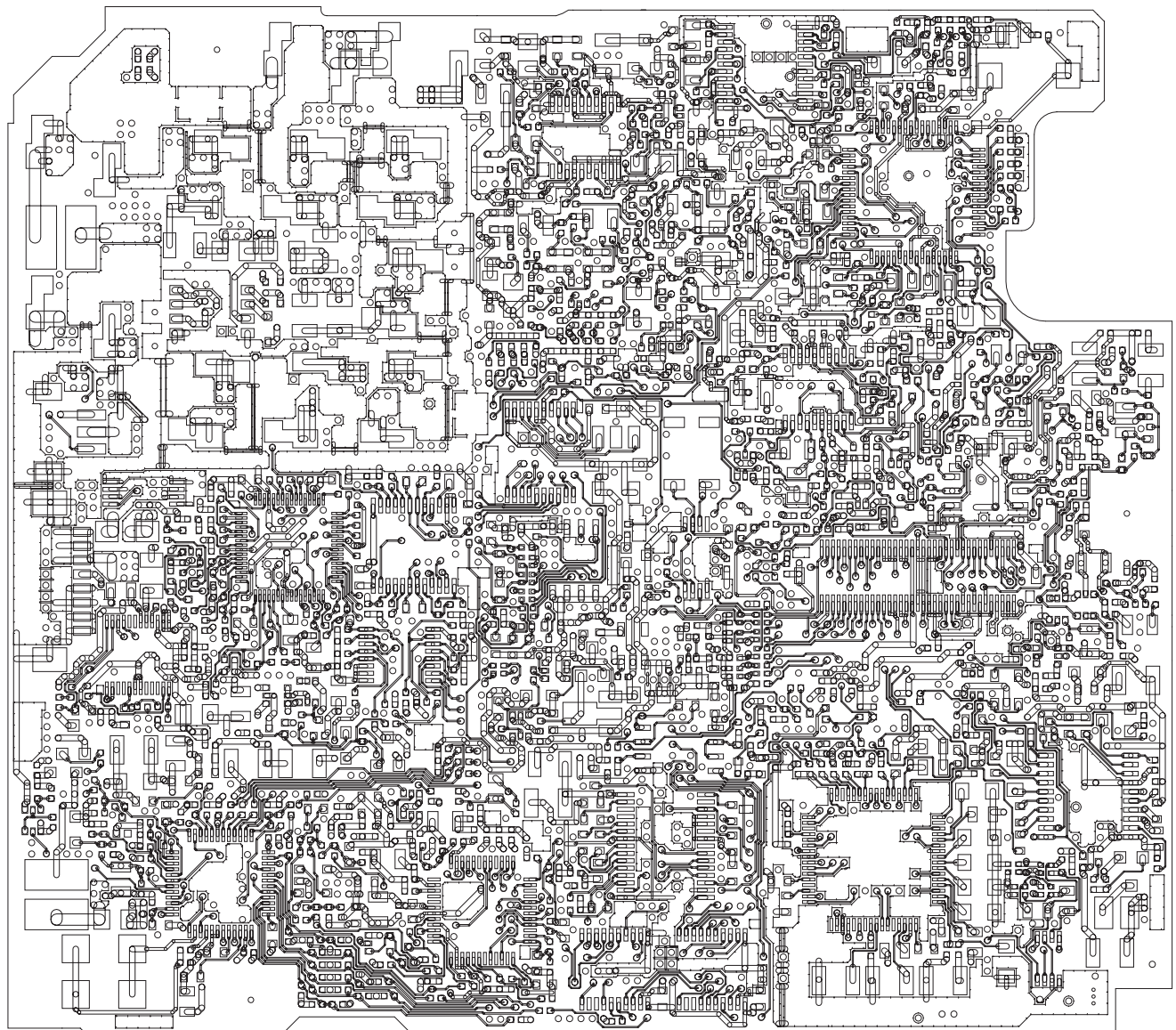
E

D

C

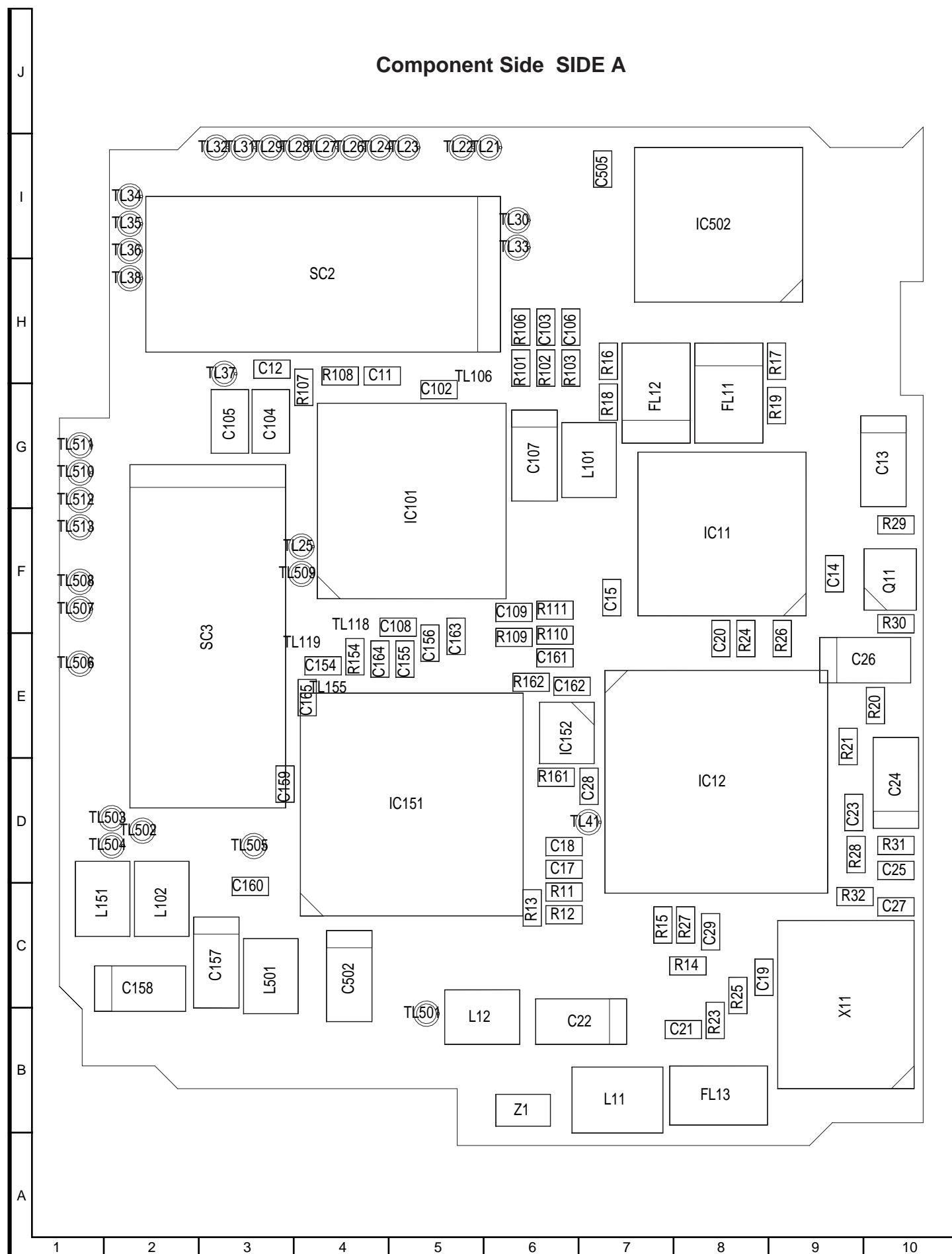
B

A

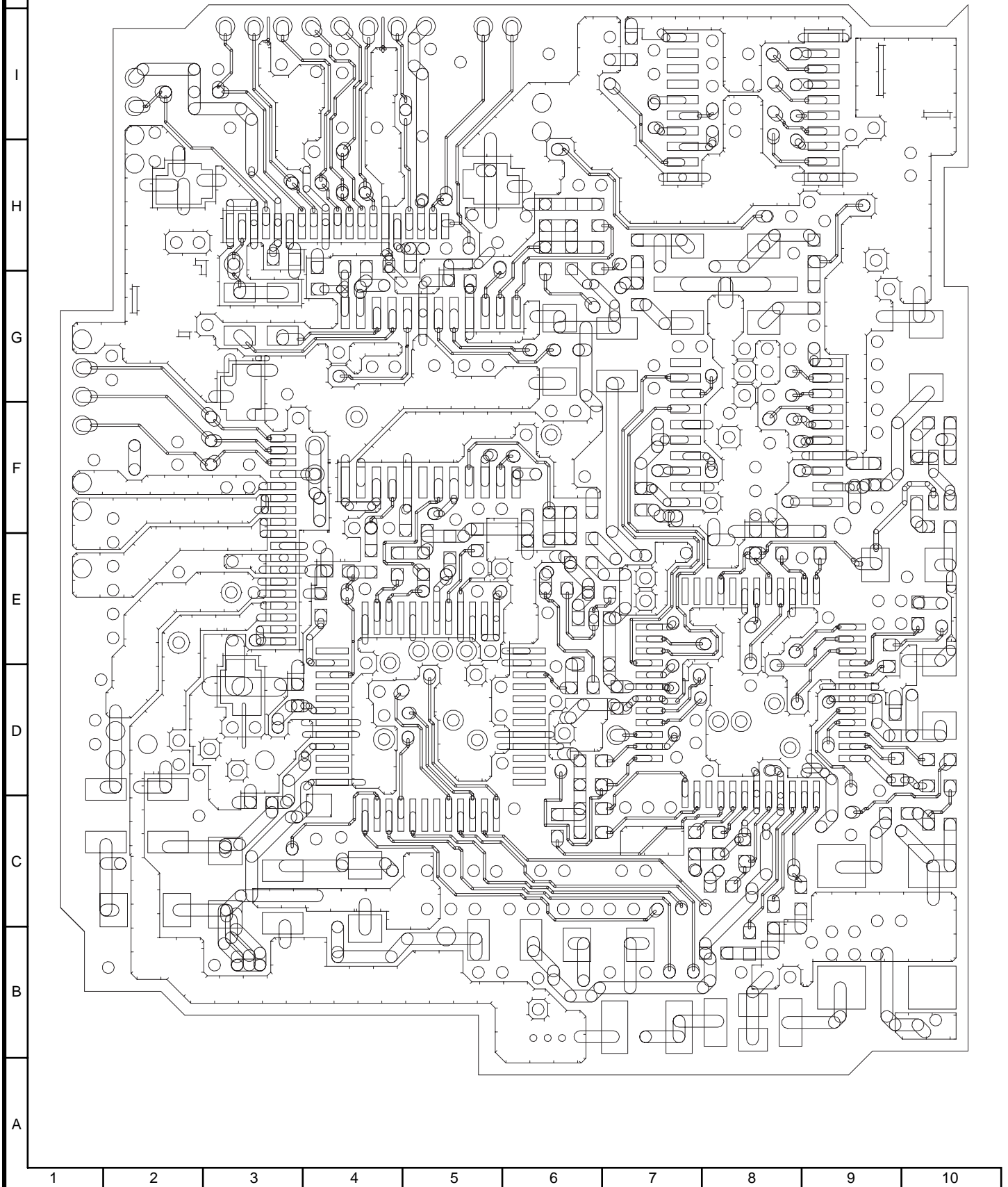


1 2 3 4 5 6 7 8 9 10

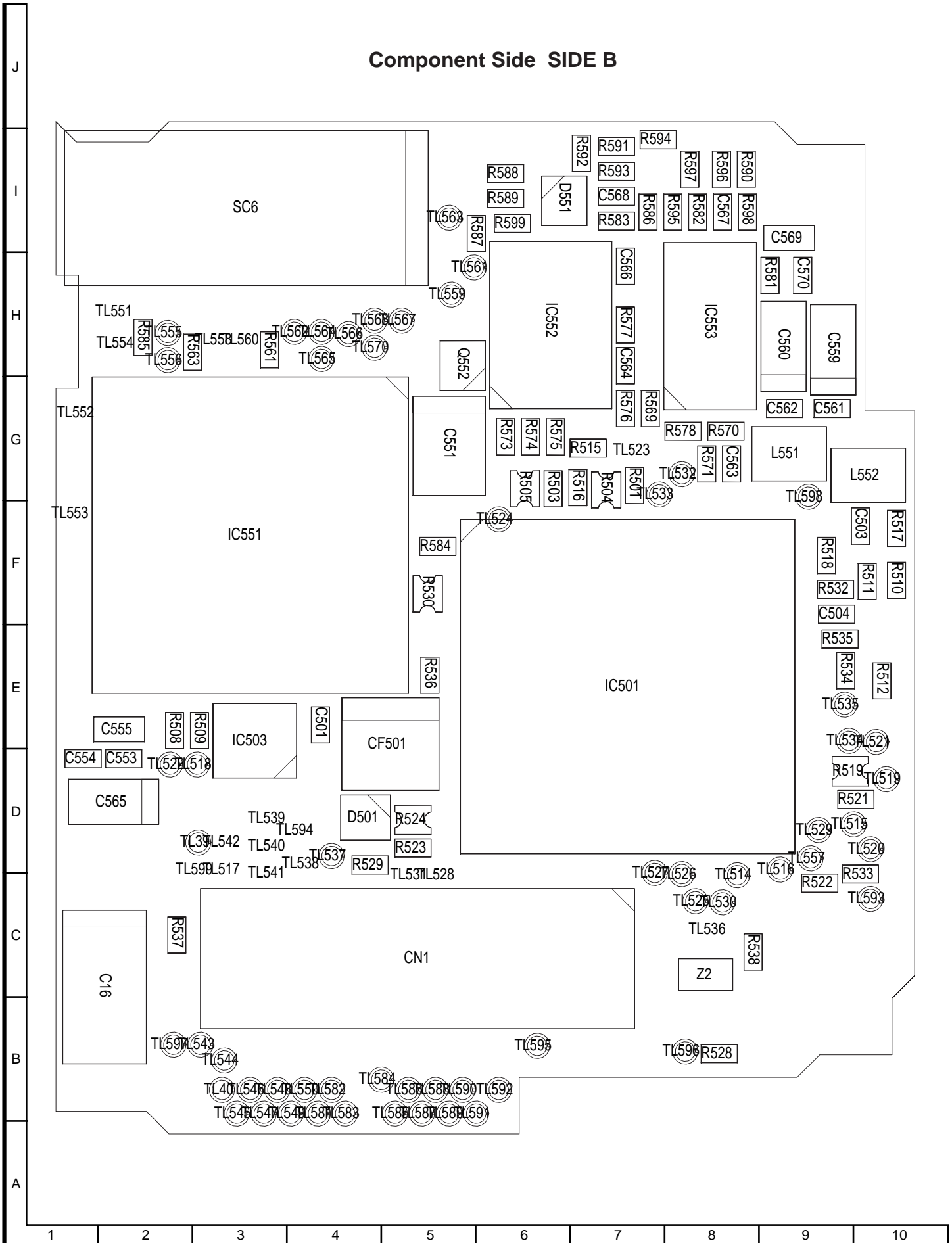
10-2. CAMERA1 P.W.B.



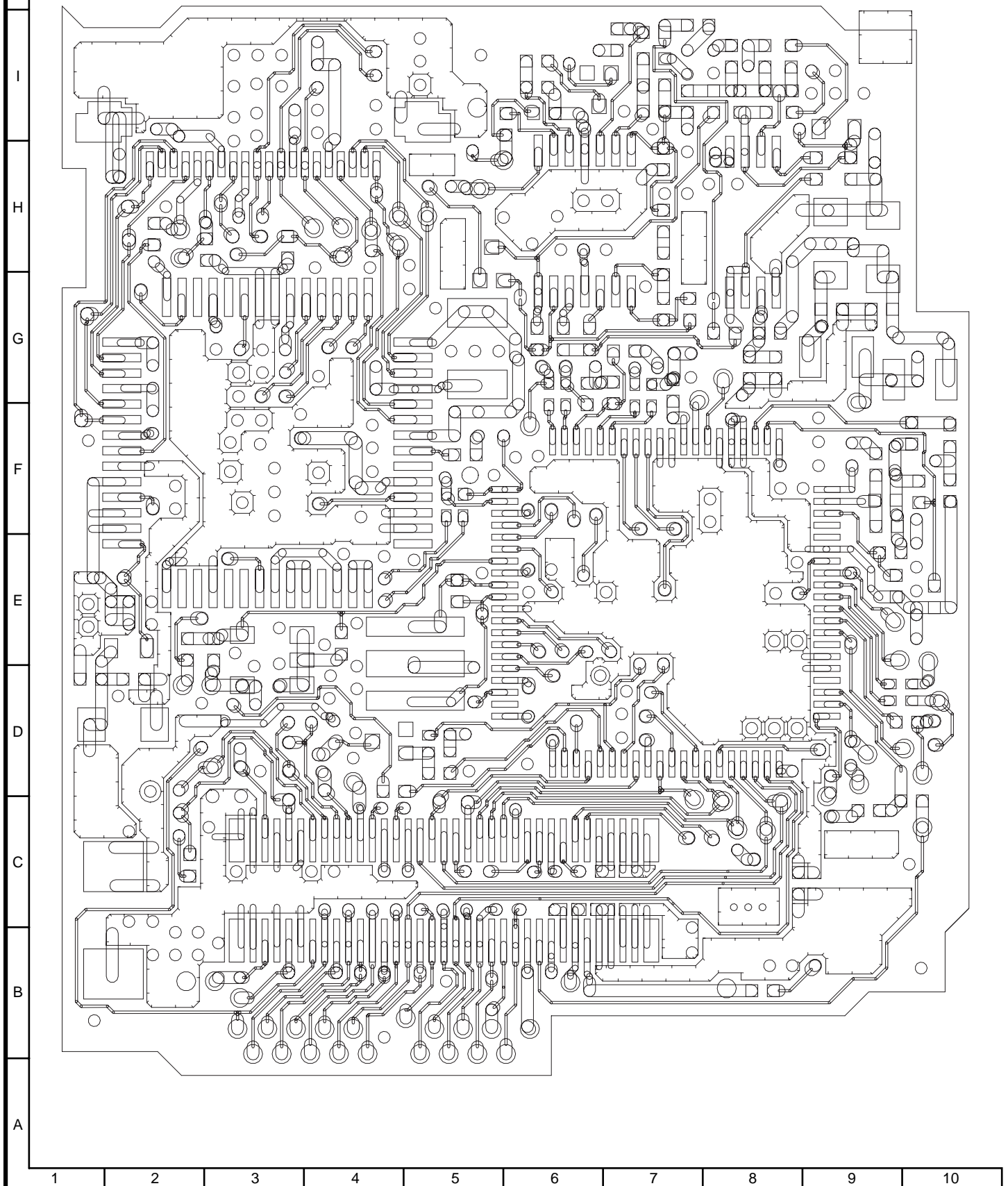
Wiring Side SIDE A



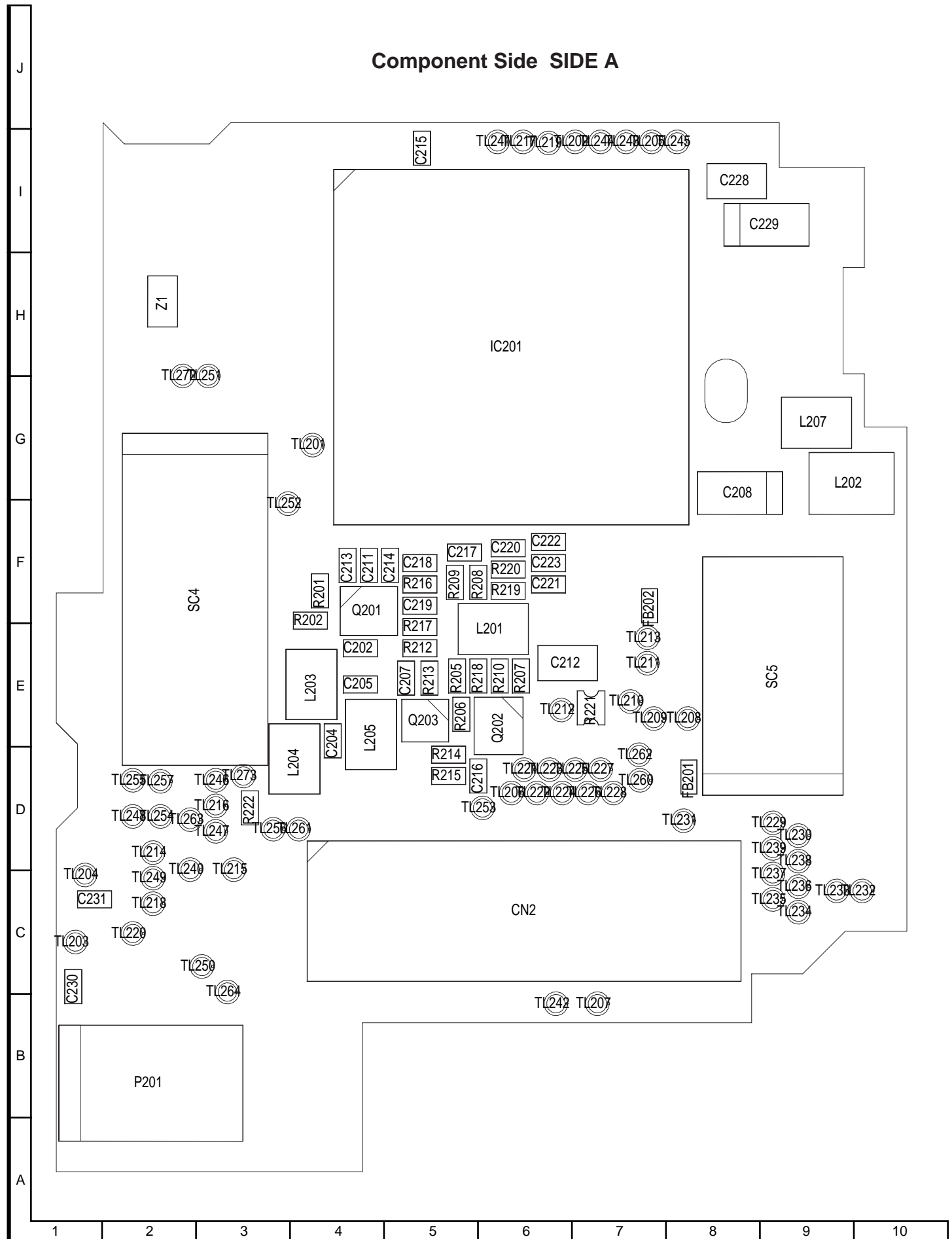
Component Side SIDE B



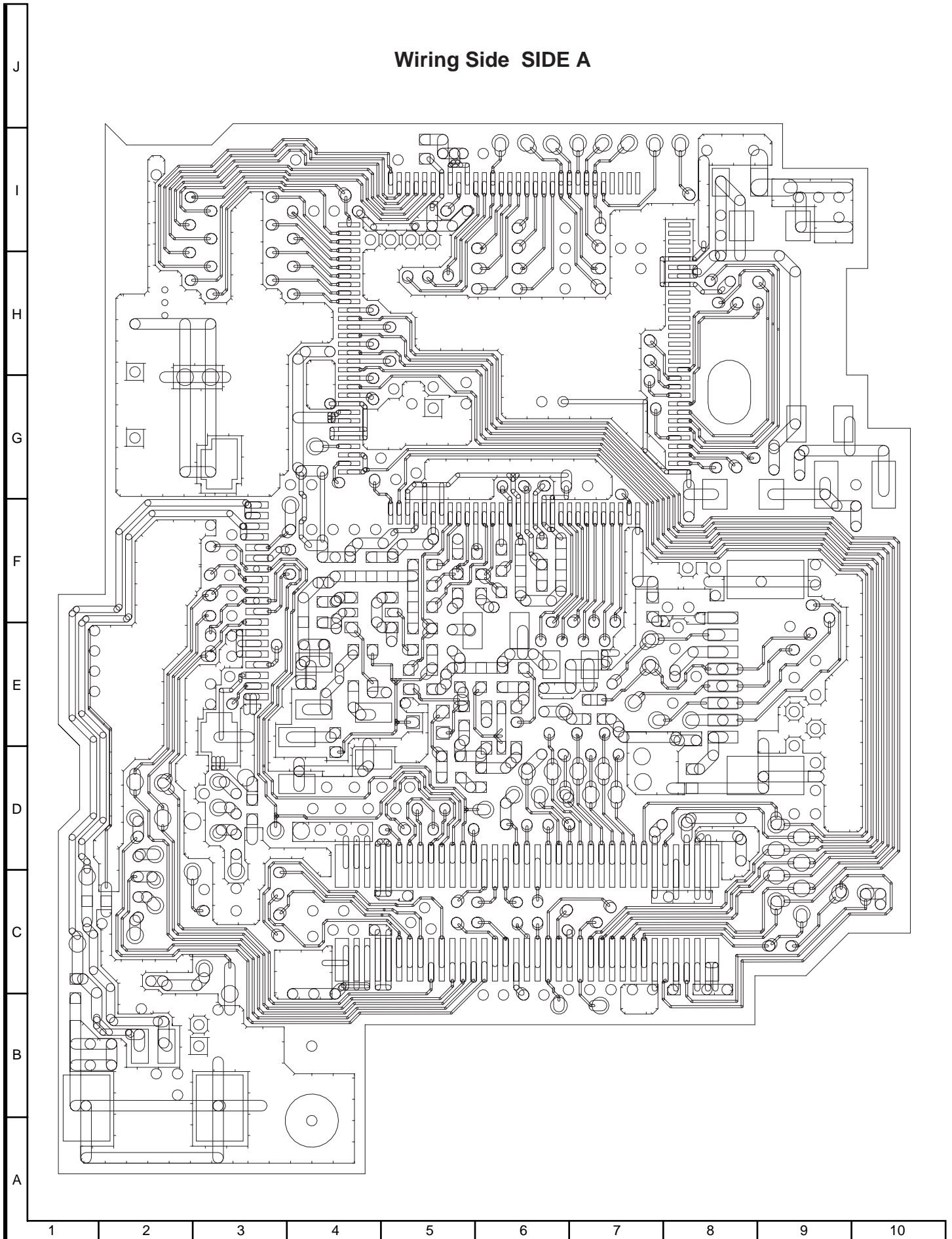
Wiring Side SIDE B



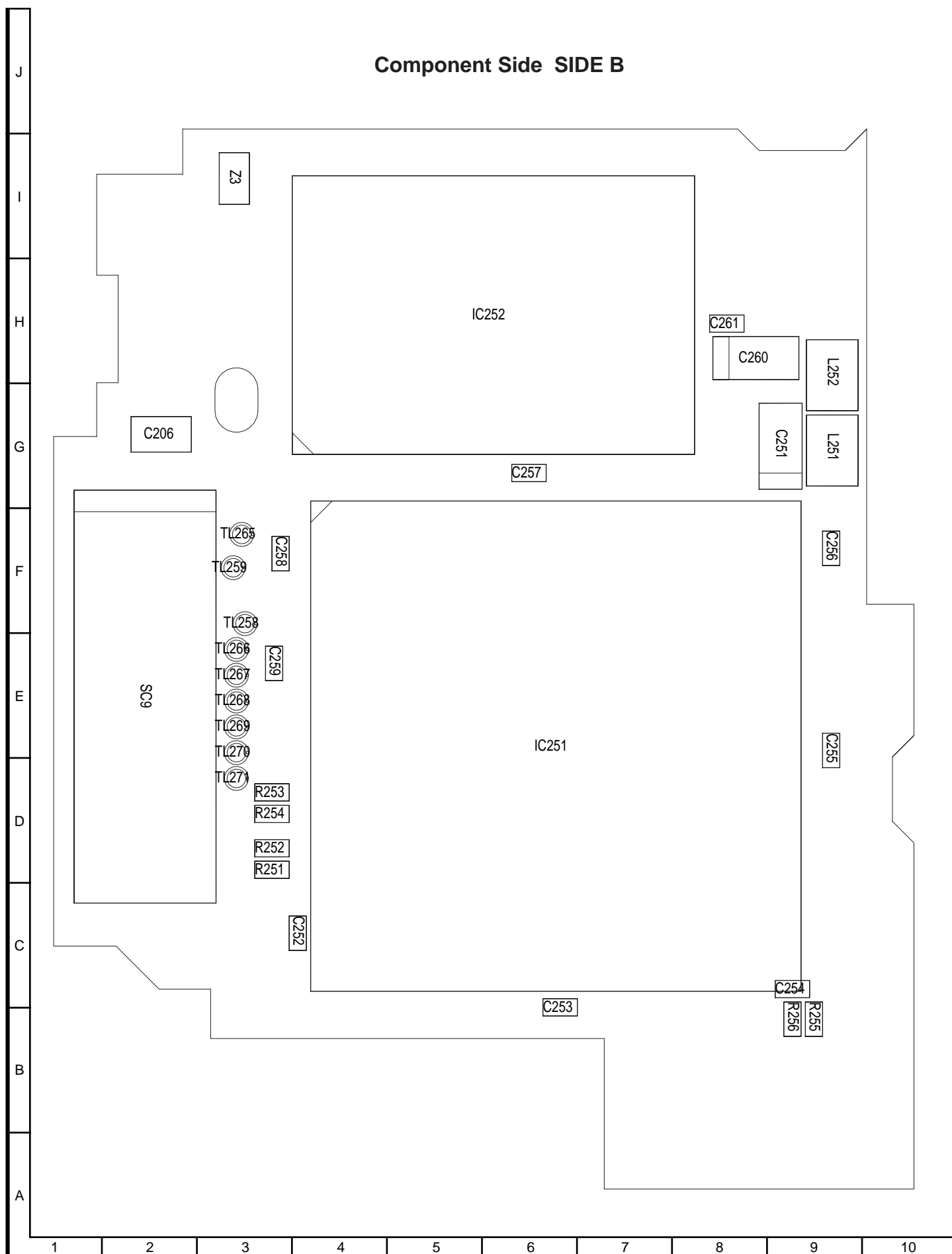
10-3. CAMERA2 P.W.B.



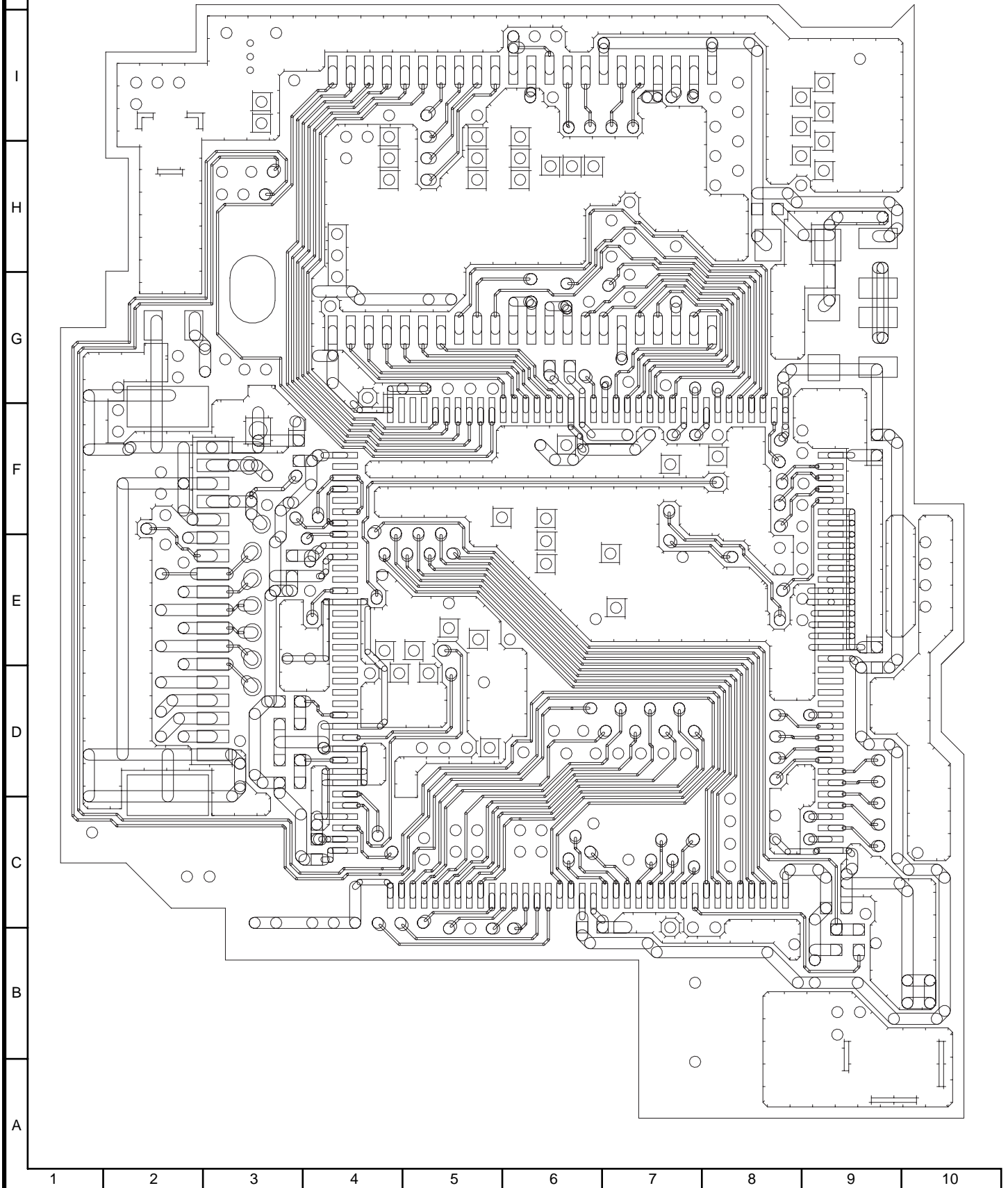
Wiring Side SIDE A



Component Side SIDE B



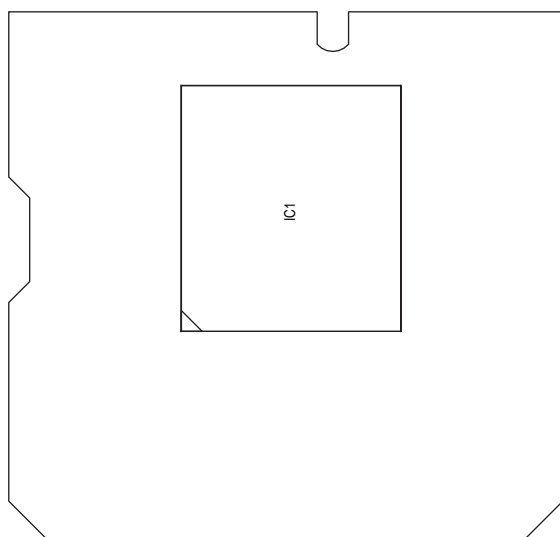
Wiring Side SIDE B



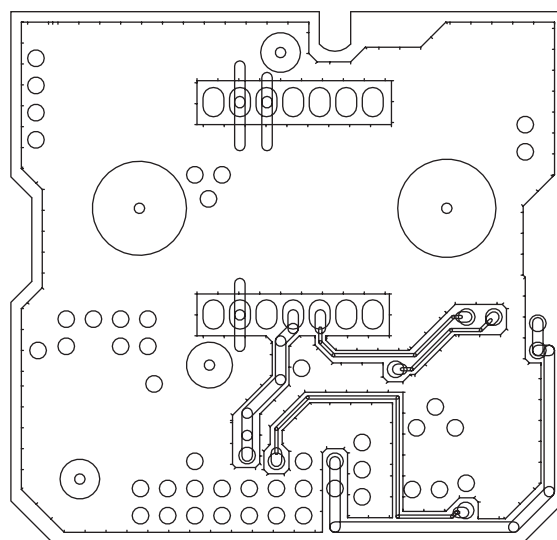
10-4. CCD P.W.B.

J

Component Side **SIDE A**



Wiring Side SIDE A



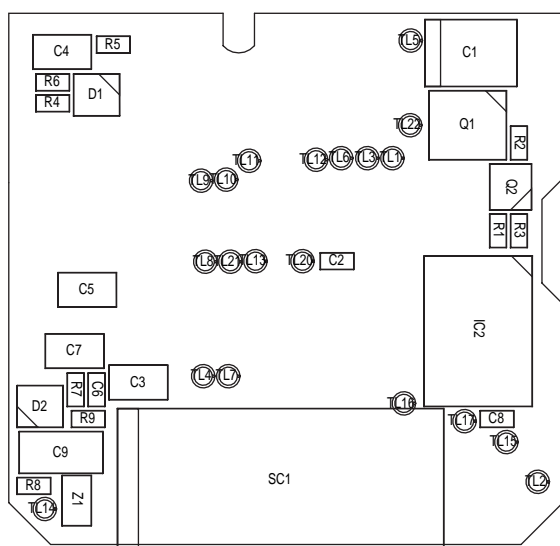
H

G

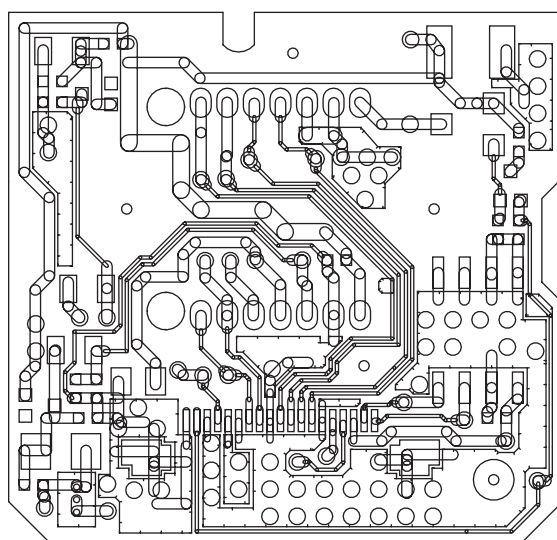
F

E

Component Side **SIDE B**



Wiring Side SIDE B



B

A

1

2

3

4

5

6

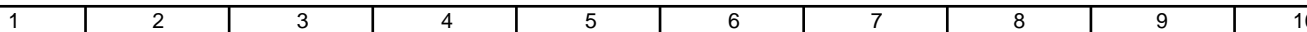
7

8

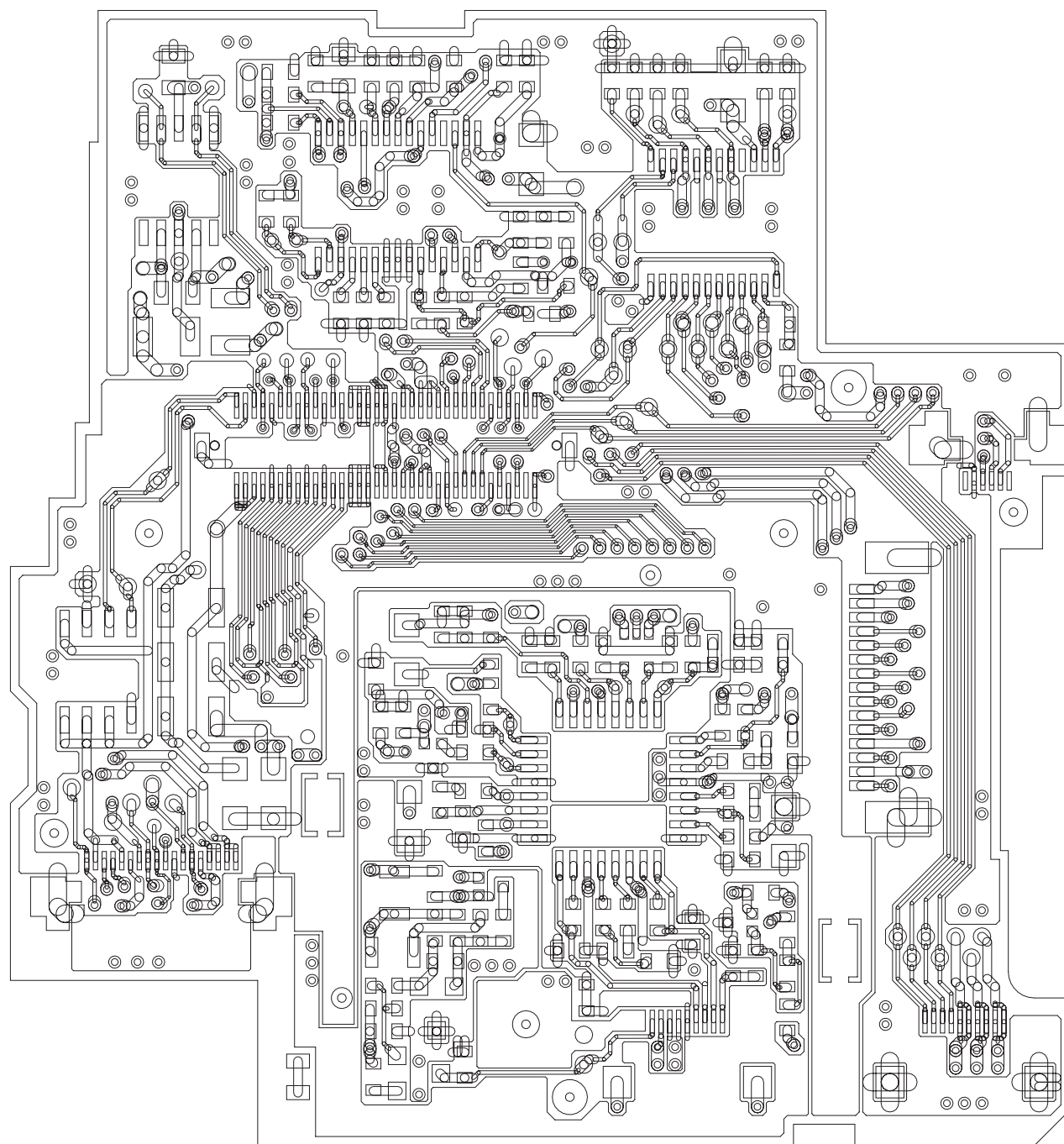
9

10

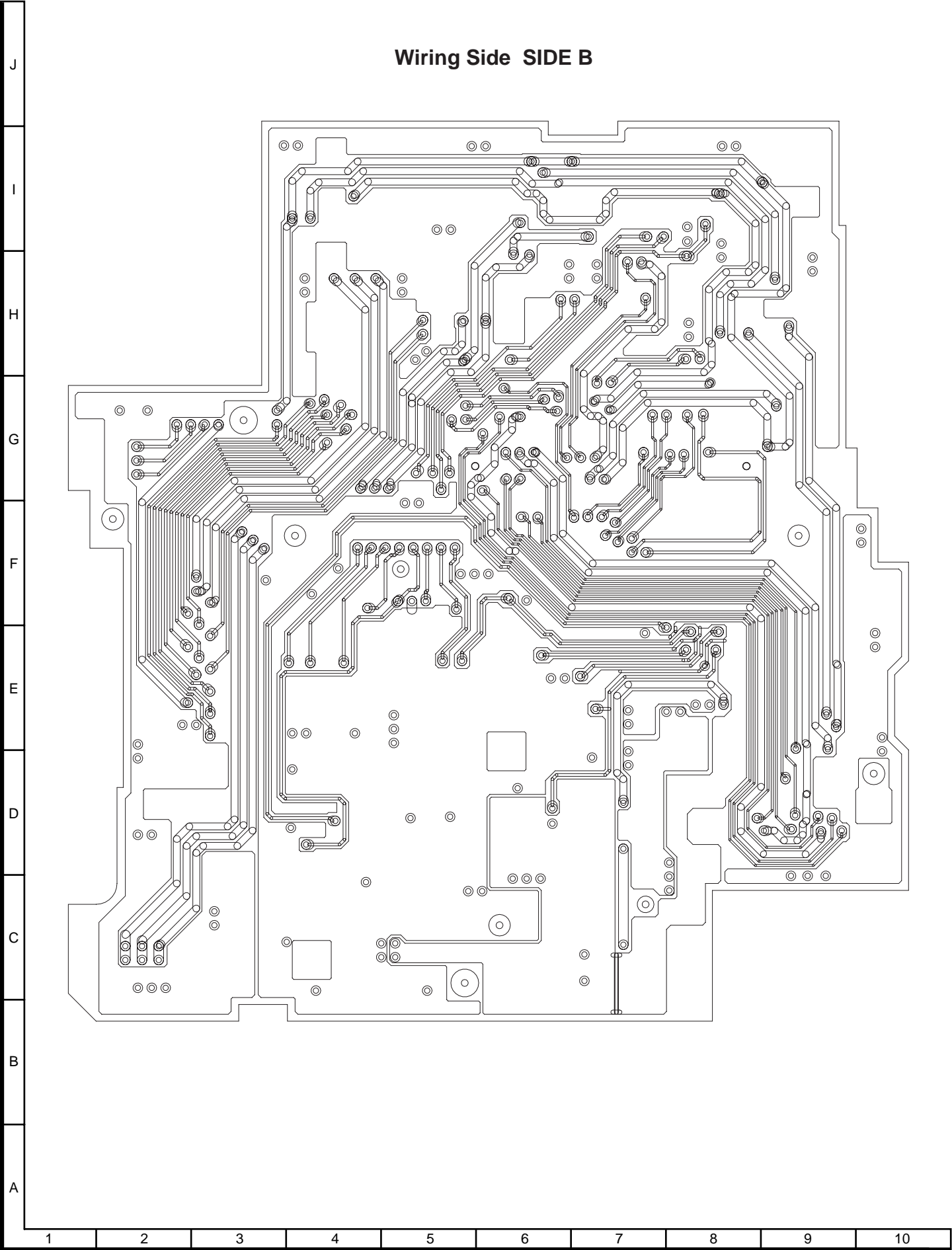
J
I
H
G
F
E
D
C
B
A



Wiring Side SIDE A



Wiring Side SIDE B



11.REPLACEMENT PARTS LIST/ EXPLODED VIEWS

ELECTRICAL PARTS LIST

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

Les pièces marquées "△" sont importantes pour maintenir la sécurité de l'appareil. Ne remplacer ces pièces que par des pièces dont le numéro est spécifié pour maintenir la sécurité et protéger le bon fonctionnement de l'appareil.

" HOW TO ORDER REPLACEMENT PARTS "

in USA: Contact your nearest SHARP Parts Distributor. For location of SHARP Parts Distributor, Call Toll-free 1-IBE800-SHARP

in CANADA: Contact SHARP Electronics of Canada Limited Phone (416) 890-2100.

★MARK : SPARE PARTS-DELIVERY SECTION:ALL JAPAN

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |
| 5. PRICE CODE | |

△ MARK: SAFETY RELATED PARTS
△ PIECES: RELATIVES A LA SECURITE

PWB ASSEMBLY IS NOT REPLACEMENT ITEM
L'ASSEMBLAGE P.C.I. EST UN ARTICLE NON REMPLACABLE

Ref. No.	Part No.	★	Description	Code
PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)				

DUNTK2886QA00	VCR Unit (VL-H870U/ H870UA/H870UC/H870UW)	—
DUNTK2886QA01	VCR Unit(VL-H875U)	—
DUNTK2886QA07	VCR Unit(VL-H890U)	—
DUNTK2889QA00	CAMERA1 Unit	—
DUNTK2892QA00	CAMERA2 Unit	—
DUNTK2895PM00	CCD Unit	—
RAMP-0031TAN0	HEAD AMP Unit	—

**DUNTK2886QA00 VCR UNIT
(VL-H870U/H870UA/H870UC/H870UW)
DUNTK2886QA01 VCR UNIT(VL-H875U)
DUNTK2886QA07 VCR UNIT(VL-H890U)**

INTEGRATED CIRCUITS

△ CP901	VHiCCP2E30/-1	CCP2E30	AD
△ CP902	VHiCCP2E30/-1	CCP2E30	AD
△ CP903	VHiCCP2E30/-1	CCP2E30	AD
IC401	VHiCXA2085R-1	CXA2085R	AX
IC601	VHiCXA1737R-1	CXA1737R	AU
IC602	VHiTC4W66U/-1	TC4W66U	AF
IC701	VHiRH5RE33A-1	RH5RE33A	AE
IC702	VHiRN5VD29A-1	RN5VD29A	AE
IC703	VHiS24C02A/-1	S24C02A	AK
IC704	RH-iX0729TAZZ	IX0729TA	AV
IC705	RH-iX0667TAZZ	IX0667TA	AQ
IC706	VHiRS5C313/-1	RS5C313	AL
IC800	VHiR3Y29AM-1	IR3Y29AM	AV
IC900	VHiMB3825A/-1	MB3825A	AR

Ref. No.	Part No.	★	Description	Code
IC901	VHiMB3788FV-1		MB3788FV	AM
IC902	VHiBU4051FV-1		BU4051FV	AF
IC1401	VHiCXA2083R-1		CXA2083R	AU
IC1602	VHiBA7785FS-1		BA7785FS	AN
IC1800	VHiNJM4565V-1		NJM4565V	AF
IC1801	VHiNJM2107F-1		NJM2107F	AE
IC1802	VHiLZ9GH16/-1		LZ9GH16(VL-H870U/ H870UA/H870UC/H870UW/H875U)	AP
IC1802	VHiLZ9GH17/-1		LZ9GH17(VL-H890U)	AP
IC2701	VHiNJM2904M-1		NJM2904M	AE
IC2702	VHiCXA1814N-1		CXA1814N	AQ
IC2901	VHiMM1433BV-1		MM1433BV	AQ
IC3701	VHiBU2092FV-1		BU2092FV	AG
IC3702	VHiBU2092FV-1		BU2092FV	AG
IC4401	VHiCXL5516N-1		CXL5516N	AK
IC4701	VHiMB88344F-1		MB88344F	AV
IC4702	VHiMB8346BV-1		MB8346BV	AN
IC5401	VHiCXL5516N-1		CXL5516N	AK
IC6601	VHiLA7471M/-1		LA7471M	AN
IC7451	VHiCXA1211M-1		CXA1211M	AH
IC8301	VHiM52374VP-1		IM52374VP	AK

TRANSISTORS

Q401	VSRN1903///-1	RN1903	AC
Q402	VSRN1903///-1	RN1903	AC
Q403	VSRT1N441U/-1	RT1N441U	AB
Q404	VSRT1N241U/-1	RT1N241U	AB
Q406	VS2SA1989R/-1	2SA1989R	AB
Q407	VSRN2704///-1	RN2704	AC
Q408	VSRN2704///-1	RN2704	AC
Q409	VSRN1703///-1	RN1703	AC
Q410	VSRN1703///-1	RN1703	AC
Q411	VS2SA1989R/-1	2SA1989R	AB
Q413	VSRT1N441U/-1	RT1N441U	AB
Q601	VSRN1904///-1	RN1904	AC
Q602	VS2SA1989R/-1	2SA1989R	AB
Q603	VSRN4984///-1	RN4984	AC
Q604	VS2SC5383F/-1	2SC5383F	AB
Q605	VSRT1N441U/-1	RT1N441U	AB
Q606	VS2SA1989R/-1	2SA1989R	AB
Q607	VSHN1B01FU/-1	HN1B01FU	AC
Q701	VSRN4983///-1	RN4983	AC
Q702	VSRN1904///-1	RN1904	AC
Q703	VSRT1N241U/-1	RT1N241U	AB
Q704	VSRN1904///-1	RN1904	AC
Q705	VSRN1904///-1	RN1904	AC
Q706	VSHN1C01FU/-1	HN1C01FU	AC
Q707	VSHN2C01FU/-1	HN2C01FU	AC
Q708	VSRN1904///-1	RN1904	AC
Q709	VSRN1904///-1	RN1904	AC
Q715	VSRT1N241U/-1	RT1N241U	AB
Q716	VSHN1B01FU/-1	HN1B01FU	AC
Q717	VSRT1N241U/-1	RT1N241U	AB
Q718	VSRN2904///-1	RN2904	AC
Q719	VSHN1C01FU/-1	HN1C01FU	AC
Q721	VSHN2A01FU/-1	HN2A01FU	AC
Q722	VSHN2C01FU/-1	HN2C01FU	AC
Q800	VS2SC5383F/-1	2SC5383F	AB
Q901	VS2SA2010///-1	2SA2010	AD
Q902	VS2SA1362GR-1	2SA1362GR	AC
Q903	VS2SA1989R/-1	2SA1989R	AB
Q904	VS2SA1362GR-1	2SA1362GR	AC
Q908	VS2SA2010///-1	2SA2010	AD
Q909	VSNDS355AN/-1	NDS355AN	AE
Q910	VS2SA1362GR-1	2SA1362GR	AC
Q911	VSRN4983///-1	RN4983	AC
Q912	VS2SA1362GR-1	2SA1362GR	AC
Q914	VS2SB1123T/-1	2SB1123T	AA
Q915	VS2SA1989R/-1	2SA1989R	AB
Q916	VS2SA1989R/-1	2SA1989R	AB
Q918	VSRT1P441U/-1	RT1P441U	AB
Q919	VSRN4983///-1	RN4983	AC
Q920	VSRN4983///-1	RN4983	AC
Q921	VS2SA1989R/-1	2SA1989R	AB
Q922	VS2SA2010///-1	2SA2010	AD

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
Q923	VSNDS355AN/-1		NDS355AN	AE	D907	RH-EX0888CEZZ		Zener, EX0888CE	AC
Q924	VS2SA1362GR-1		2SA1362GR	AC	D908	RH-EX0873CEZZ		Zener, EX0873CE	AD
Q926	VS2SA2010//-1		2SA2010	AD	D909	VHDF1J2H///-1		F1J2H	AD
Q927	VS2SA2010//-1		2SA2010	AD	D910	VHDF1J2H///-1		F1J2H	AD
Q928	VS2SA2010//-1		2SA2010	AD	D911	VHDF1J2H///-1		F1J2H	AD
Q929	VS2SA2010//-1		2SA2010	AD	D912	VHDF1J2H///-1		F1J2H	AD
Q930	VS2SA1989R/-1		2SA1989R	AB	D913	VHDF1J2H///-1		F1J2H	AD
Q931	VS2SA1989R/-1		2SA1989R	AB	D1401	VHDMA133///-1		DMA133	AB
Q936	VS2SA1362GR-1		2SA1362GR	AC	D1402	VHDMA133///-1		DMA133	AB
Q937	VS2SA1989R/-1		2SA1989R	AB	D1403	VHDMA133///-1		DMA133	AB
Q938	VS2SC4944Y/-1		2SC4944Y	AC	D1800	RH-EX0189TAZZ		Zener, EX0189TA	AC
Q1401	VSARN1704///-1		RN1704	AC	D1801	VHDF1J2H///-1		HVC359TR	AD
Q1602	VSRT1N441U/-1		RT1N441U	AB	D1901	VHDM2S111/-1		MA2S111	AC
Q1603	VS2SB12956/-1		2SB12956	AB	D2904	VHDF1J2H///-1		F1J2H	AD
Q1604	VS2SB12956/-1		2SB12956	AB	D2909	RH-EX0873CEZZ		Zener, EX0873CE	AD
Q1605	VSRT1N441U/-1		RT1N441U	AB	D2910	VHDF1J2H///-1		F1J2H	AD
Q1800	VSHN1B01FU/-1		HN1B01FU	AC	D8356	VHDMA147///-1		MA147	AB
Q2800	VSARN1704///-1		RN1704	AC					
Q2801	VSARN4990///-1		RN4990	AC					
Q2802	VSARN4990///-1		RN4990	AC					
Q2901	VSFTS1001///-1		FTS1001	AG	TH1800	VHHT1103K44-1		Thermistor	AD
Q2903	VSFTS1001///-1		FTS1001	AG	X701	RCRSC0030TAZZ		Crystal, CRSC0030TA	AG
Q2905	VS2SB1302S/-1		2SB1302S	AD	X702	RCRSC0032TAZZ		Crystal, CRSC0032TA	AG
Q2910	VSARN4983///-1		RN4983	AC	X800	RCRSC0087TAZZ		Crystal, CRSC0087TA	AK
Q2911	VS2SA1362GR-1		2SA1362GR	AC				(VL-H870U/H870UA/H870UC/ H870UW/H875U)	
Q4401	VS2SA1989R/-1		2SA1989R	AB	X800	RCRSC0095TAZZ		Crystal, CRSC0095TA	AG
Q4402	VS2SA1989R/-1		2SA1989R	AB				(VL-H890U)	
Q4403	VSHN1C01FU/-1		HN1C01FU	AC	X1401	RCRSC0143TAZZ		Crystal, CRSC0143TA	AH
Q4405	VSHN1C01FU/-1		HN1C01FU	AC					
Q4407	VS2SA1362GR-1		2SA1362GR	AC					
Q5401	VS2SA1989R/-1		2SA1989R	AB					
Q6401	VS2SA1989R/-1		2SA1989R	AB					
Q6402	VS2SC5383F/-1		2SC5383F	AB					
Q6403	VSXP1B301///-1		XP1B301	AD					
Q6406	VS2SC5383F/-1		2SC5383F	AB					
Q6407	VSXP1B301///-1		XP1B301	AD					
Q7401	VS2SA1989R/-1		2SA1989R	AB					
Q7402	VS2SC5384C/-1		2SC5384C	AB					
Q7403	VS2SC5383F/-1		2SC5383F	AB					
Q7404	VS2SA1989R/-1		2SA1989R	AB					
Q7453	VSRT1P241U/-1		RT1P241U	AB					
Q7454	VS2SC5384C/-1		2SC5384C	AB					
Q7456	VSARN1703///-1		RN1703	AC					
Q7457	VSHN1C01FU/-1		HN1C01FU	AC					
Q8303	VS2SA1989R/-1		2SA1989R	AB					
Q8304	VS2SA1989R/-1		2SA1989R	AB					
Q8306	VS2SC5384C/-1		2SC5384C	AB					
Q8307	VSHN2C01FU/-1		HN2C01FU	AC					
Q8356	VSHN2C01FU/-1		HN2C01FU	AC					
Q8361	VS2SA1873Y/-1		2SA1873Y	AC					
Q8362	VSHN1B01FU/-1		HN1B01FU	AC					
Q8401	VSHN1C01FU/-1		HN1C01FU	AC					
Q8402	VSARN1703///-1		RN1703	AC					
Q8404	VS2SA1989R/-1		2SA1989R	AB					
Q8405	VS2SC5384C/-1		2SC5384C	AB					
Q8406	VSHN1C01FU/-1		HN1C01FU	AC					
Q8407	VS2SC5383F/-1		2SC5383F	AB					
Q8408	VS2SA1362GR-1		2SA1362GR	AC					
Q8409	VSARN4983///-1		RN4983	AC					
Q8452	VSHN1C01FU/-1		HN1C01FU	AC					
Q8453	VSRT1N441U/-1		RT1N441U	AB					
Q9401	VSARN1704///-1		RN1704	AC					
Q9601	VSARN4983///-1		RN4983	AC					
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Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
L6401	VPD9M220K2R0N		Peaking 22μH	AC	C612	VCKYCY1HB332K		3300p 50V Ceramic	AA
L6601	VPCCM331K7R0N		Peaking 330μH	AC	C613	VCKYTV1CB474K		0.47 16V Ceramic	AC
L7401	VPD9M1R8JR84N		Peaking 1.8μH	AC	C614	VCKYCY1HB332K		3300p 50V Ceramic	AA
L7402	VPD9M121J140N		Peaking 120μH	AC	C615	VCKYCY1HF103Z		0.01 50V Ceramic	AB
L7403	VPAEM391J220N		Peaking 390μH	AC	C616	VCKYCY1HF103Z		0.01 50V Ceramic	AB
L8301	VPD9M330J3R6N		Peaking 33μH	AC	C617	VCKYCY1HF103Z		0.01 50V Ceramic	AB
L8302	VPD9M8R2J2R0N		Peaking 8.2μH	AC	C618	VCSAPD1AJ225M		2.2 10V Tantalum	AC
L8303	VPD9M3R3J1R2N		Peaking 3.3μH	AC	C619	VCKYCY1HB681K		680p 50V Ceramic	AB
L8356	VPD9M8R2J2R0N		Peaking 8.2μH	AC	C620	VCKYCY1HF103Z		0.01 50V Ceramic	AB
L8359	VPD9M2R2JR96N		Peaking 2.2μH	AC	C621	VCCCCZ1HH220J		22p 50V Ceramic	AB
L8401	VPD9M470J6R6N		Peaking 47μH	AC	C622	VCSATA0JJ226M		22 6.3V Tantalum	AD
L8402	VPD9M181J190N		Peaking 180μH	AC	C623	VCSAPD1CJ105M		1 16V Tantalum	AC
L8403	VPAEM471J250N		Peaking 470μH	AC	C624	VCKYTV1CB224K		0.22 16V Ceramic	AB
L8404	VPAEM331J210N		Peaking 330μH	AC	C625	VCSATA1AJ475M		4.7 10V Tantalum	AC
L8405	VPD9M330J3R6N		Peaking 33μH	AC	C626	VCSATA0JJ106M		10 6.3V Tantalum	AD
L8406	VPCCM220KR45N		Peaking 22μH	AC	C627	VCSATA0JJ106M		10 6.3V Tantalum	AD
L8408	VPD9M180J2R4N		Peaking 18μH	AC	C628	VCSATA0JJ106M		10 6.3V Tantalum	AD
△ T901	RTRNZ0146TAZZ		Transformer	AF	C629	VCKYTV1CB224K		0.22 16V Ceramic	AB
CAPACITORS					C630	VCSATE1AJ476M		47 10V Tantalum	AD
C401	VCSATE1AJ476M	47	10V Tantalum	AD	C631	VCSATA1AJ475M		4.7 10V Tantalum	AC
C402	VCKYCY1CB104K	0.1	16V Ceramic	AB	C632	VCKYTV1CB474K		0.47 16V Ceramic	AC
C403	VCKYCY1CB104K	0.1	16V Ceramic	AB	C633	VCKYTV1CB224K		0.22 16V Ceramic	AB
C404	VCSATA1AJ106M	10	10V Tantalum	AC	C634	VCSATA0JJ226M		22 6.3V Tantalum	AD
C405	VCSATA1AJ106M	10	10V Tantalum	AC	C635	VCKYTV1AB105K		1 10V Ceramic	AD
C406	VCKYCY1CB103K	0.01	16V Ceramic	AB	C636	VCKYTV1CB224K		0.22 16V Ceramic	AB
C407	VCKYCY1CB103K	0.01	16V Ceramic	AB	C637	VCSATA1AJ475M		4.7 10V Tantalum	AC
C408	VCKYCY1CB103K	0.01	16V Ceramic	AB	C638	VCSATA1AJ475M		4.7 10V Tantalum	AC
C409	VCCCCZ1HH101J	100p	50V Ceramic	AB	C639	VCKYCY1HB102K		1000p 50V Ceramic	AA
C410	VCKYCY1AB474K	0.47	10V Ceramic	AC	C641	VCSATE1AJ476M		47 10V Tantalum	AD
C411	VCKYCY1CB103K	0.01	16V Ceramic	AB	C642	VCKYTV1CB224K		0.22 16V Ceramic	AB
C412	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C643	VCSATE0JJ336M		33 6.3V Tantalum	AD
C414	VCKYCY1CB103K	0.01	16V Ceramic	AB	C644	VCSATE0JJ336M		33 6.3V Tantalum	AD
C415	VCKYCY1CB103K	0.01	16V Ceramic	AB	C645	VCKYCY1HF103Z		0.01 50V Ceramic	AB
C416	VCKYCY1AB474K	0.47	10V Ceramic	AC	C646	VCSATE1AJ476M		47 10V Tantalum	AD
C417	VCKYCY1AB474K	0.47	10V Ceramic	AC	C647	VCKYCY1AF104Z		0.1 10V Ceramic	AB
C418	VCKYCY1CB103K	0.01	16V Ceramic	AB	C649	VCKYCY1HB102K		1000p 50V Ceramic	AB
C419	VCKYCY1CB103K	0.01	16V Ceramic	AB	C650	VCKYCY1HB102K		1000p 50V Ceramic	AB
C420	VCKYCY1CB104K	0.1	16V Ceramic	AB	C697	VCKYCY1HB102K		1000p 50V Ceramic	AA
C421	VCSATE1AJ476M	47	10V Tantalum	AD	C698	VCKYTV1CB224K		0.22 16V Ceramic	AB
C422	VCKYCY1AB474K	0.47	10V Ceramic	AC	C699	VCSATA0JJ106M		10 6.3V Tantalum	AD
C423	VCKYCY1CB103K	0.01	16V Ceramic	AB	C701	VCKYCY1HB102K		1000p 50V Ceramic	AA
C424	RC-KZ0054TAZZ	2.2	16V Ceramic	AD	C702	VCKYCY1HB102K		1000p 50V Ceramic	AA
C425	VCKYCY1CB473K	0.047	16V Ceramic	AA	C703	VCKYCY1HB102K		1000p 50V Ceramic	AA
C426	VCKYTV1AB105K	1	10V Ceramic	AD	C704	VCKYCY1HB102K		1000p 50V Ceramic	AA
C427	VCKYTV1CB334K	0.33	16V Ceramic	AC	C706	VCKYCY1HB102K		1000p 50V Ceramic	AA
C428	VCKYCY1AB474K	0.47	10V Ceramic	AC	C707	VCKYCY1HB102K		1000p 50V Ceramic	AA
C429	VCCCCY1HH221J	220p	50V Ceramic	AA	C710	VCKYCY1AF105Z		1 10V Ceramic	AC
C430	VCCCCY1HH471J	470p	50V Ceramic	AA	C712	VCCCCY1HH100D		10p 50V Ceramic	AA
C431	VCKYCY1AB474K	0.47	10V Ceramic	AC	C713	VCKYCY1CF104Z		0.1 16V Ceramic	AA
C432	RC-KZ0054TAZZ	2.2	16V Ceramic	AD	C714	VCKYCY1HF103Z		0.01 50V Ceramic	AA
C433	VCSATA1AJ106M	10	10V Tantalum	AC	C715	VCCCCY1HH100D		10p 50V Ceramic	AA
C435	VCKYCY1CB104K	0.1	16V Ceramic	AB	C716	VCKYCY1HB471K		470p 50V Ceramic	AA
C436	VCKYCY1CB103K	0.01	16V Ceramic	AB	C717	VCSATA1AJ106M		10 10V Tantalum	AC
C437	VCKYTV1CB474K	0.47	16V Ceramic	AC	C718	VCKYCY1CF104Z		0.1 16V Ceramic	AA
C438	VCCCCY1HH101J	100p	50V Ceramic	AA	C719	VCKYCY1HB102K		1000p 50V Ceramic	AA
C439	VCKYCY1CB103K	0.01	16V Ceramic	AB	C720	VCKYCY1HB102K		1000p 50V Ceramic	AB
C440	VCKYCY1CB103K	0.01	16V Ceramic	AB	C721	VCKYCY1HF103Z		0.01 50V Ceramic	AA
C441	VCCCCY1HH471J	470p	50V Ceramic	AA	C722	VCKYCY1HF103Z		0.01 50V Ceramic	AA
C442	VCSATA1AJ106M	10	10V Tantalum	AC	C723	VCSATA1AJ106M		10 10V Tantalum	AC
C443	VCKYCY1CB103K	0.01	16V Ceramic	AB	C724	VCKYCY1AF105Z		1 10V Ceramic	AC
C444	VCKYCY1CB103K	0.01	16V Ceramic	AB	C725	VCCCCY1HH390J		39p 50V Ceramic	AA
C446	VCCCCY1HH151J	150p	50V Ceramic	AA	C726	VCKYCY1AF105Z		1 10V Ceramic	AC
C447	VCCCCY1HH151J	150p	50V Ceramic	AA	C800	VCKYCY1HB471K		470p 50V Ceramic	AB
C448	VCCCCY1HH331J	330p	50V Ceramic	AA	C801	VCKYCY0JB105K		1 6.3V Ceramic	AC
C449	VCCCCY1HH391J	390p	50V Ceramic	AA	C803	VCKYCY1HF103Z		0.01 50V Ceramic	AB
C452	VCCCCY1HH151J	150p	50V Ceramic	AA	C804	VCKYCY1HF103Z		0.01 50V Ceramic	AB
C453	VCCCCY1HH151J	150p	50V Ceramic	AA	C805	VCKYCY1HF103Z		0.01 50V Ceramic	AB
C455	VCCCCY1HH331J	330p	50V Ceramic	AA	C806	VCKYCY1HF103Z		0.01 50V Ceramic	AB
C456	VCCCCY1HH391J	390p	50V Ceramic	AA	C807	VCKYCY1HF103Z		0.01 50V Ceramic	AB
C458	VCCCCY1HH101J	100p	50V Ceramic	AB	C808	VCKYCY1HF103Z		0.01 50V Ceramic	AB
C601	VCKYTV1CF225Z	2.2	16V Ceramic	AC	C809	VCKYCY1CF104Z		0.1 16V Ceramic	AA
C602	VCKYTV1CF225Z	2.2	16V Ceramic	AC	C810	VCKYCY0JB105K		1 6.3V Ceramic	AC
C609	VCKYCY1AF105Z	1	10V Ceramic	AC	C811	VCKYCY0JB105K		1 6.3V Ceramic	AC
C610	VCKYCY1AF105Z	1	10V Ceramic	AC	C812	VCKYTV1CB105K		1 16V Ceramic	AC
					C813	VCKYCY1HF103Z		0.01 50V Ceramic	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C814	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1416	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C815	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1417	VCKYCY1AB474K	0.47	10V Ceramic	AC
C816	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1418	VCKYTV1AB105K	1	10V Ceramic	AD
C817	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1419	VCKYCZ1CB223K	0.022	16V Ceramic	AC
C818	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1420	VCKYCY1AB474K	0.47	10V Ceramic	AC
C819	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1421	VCKYTV1CB334K	0.33	16V Ceramic	AC
C820	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1422	VCKYTV1AB105K	1	10V Ceramic	AD
C821	VCCCCZ1HH150J	15p	50V Ceramic	AB	C1423	VCCCCZ1HH220J	22p	50V Ceramic	AB
C822	VCKYCZ1EB682K	6800p	25V Ceramic	AB	C1424	VCKYTV1AB105K	1	10V Ceramic	AD
C824	VCSATA1AJ335M	3.3	10V Tantalum	AC	C1425	VCCCCZ1HH101J	100p	50V Ceramic	AB
C825	VCKYTV1CB474K	0.47	16V Ceramic	AC	C1426	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C829	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1427	VCKYCY1AB474K	0.47	10V Ceramic	AC
C831	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1428	VCSATA1AJ106M	10	10V Tantalum	AC
C832	VCSATA1AJ106M	10	10V Tantalum	AC	C1429	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C834	VCKYCY0JB105K	1	6.3V Ceramic	AC	C1430	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C836	VCKYCY1CF334Z	0.33	16V Ceramic	AA	C1431	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C838	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1432	VCKYCZ1CB103K	0.01	16V Ceramic	AB
C839	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1433	VCSATA1AJ106M	10	10V Tantalum	AC
C842	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1434	VCCCCZ1HH151J	150p	50V Ceramic	AB
C843	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	C1435	VCKYCY1CB104K	0.1	16V Ceramic	AB
C844	VCSATA1AJ106M	10	10V Tantalum	AC	C1436	VCKYCY1CB104K	0.1	16V Ceramic	AB
C901	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1437	VCSATA1AJ106M	10	10V Tantalum	AC
C902	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1438	VCKYCY1AB474K	0.47	10V Ceramic	AC
C903	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1439	VCCCCZ1HH151J	150p	50V Ceramic	AB
C905	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1601	VCKYCY1CB473K	0.047	16V Ceramic	AA
C906	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1602	VCSATA1AJ106M	10	10V Tantalum	AC
C907	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1603	VCKYCY1CF474Z	0.47	16V Ceramic	AB
C908	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1604	VCKYCY1CF474Z	0.47	16V Ceramic	AB
C909	VCKYTV1AB105K	1	10V Ceramic	AD	C1605	VCKYCY1CF474Z	0.47	16V Ceramic	AB
C910	RC-KZ0054TAZZ	2.2	16V Ceramic	AD	C1606	VCKYCY1CB473K	0.047	16V Ceramic	AA
C911	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1609	VCKYCZ1HB222K	2200p	50V Ceramic	AB
C912	RC-KZ0058TAZZ	1	25V Ceramic	AC	C1610	VCKYCY1AF105Z	1	10V Ceramic	AC
C913	RC-KZ0058TAZZ	1	25V Ceramic	AC	C1611	VCKYCY1AF105Z	1	10V Ceramic	AC
C914	RC-KZ0058TAZZ	1	25V Ceramic	AC	C1612	VCKYCZ1HB222K	2200p	50V Ceramic	AB
C915	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1614	VCSATE1AJ476M	47	10V Tantalum	AD
C916	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1615	VCKYCY1CB473K	0.047	16V Ceramic	AA
C917	VCKYTV1CF105Z	1	16V Ceramic	AB	C1616	VCKYCY1CB473K	0.047	16V Ceramic	AA
C918	VCKYTV1EB104K	0.1	25V Ceramic	AB	C1617	VCSATE1AJ476M	47	10V Tantalum	AD
C919	VCKYTV1CF105Z	1	16V Ceramic	AB	C1618	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C921	VCKYTV1EB104K	0.1	25V Ceramic	AB	C1619	VCKYCY1HB102K	1000p	50V Ceramic	AA
C923	VCKYTV1CF105Z	1	16V Ceramic	AB	C1800	VCKYCY1CF104Z	0.1	16V Ceramic	AA
C924	VCKYTV1CF105Z	1	16V Ceramic	AB	C1802	VCSATA1AJ106M	10	10V Tantalum	AC
C925	VCKYCY1CB104K	0.1	16V Ceramic	AB	C1803	VCSATE1CJ226M	22	16V Tantalum	AE
C926	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1804	VCCCCZ1HH8R0D	8p	50V Ceramic	AB
C927	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1805	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C928	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1806	VCKYCY1CF104Z	0.1	16V Ceramic	AA
C929	RC-KZ0054TAZZ	2.2	16V Ceramic	AD	C1807	VCSATA1DJ475M	4.7	20V Tantalum	AC
C930	RC-KZ0049TAZZ	6.8	16V Ceramic	AD	C1808	VCKYCY1CF104Z	0.1	16V Ceramic	AA
C931	RC-KZ0049TAZZ	6.8	16V Ceramic	AD	C1809	VCKYCY0JB105K	1	6.3V Ceramic	AC
C932	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1810	VCKYCY1CF104Z	0.1	16V Ceramic	AA
C933	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1811	VCKYCY0JB105K	1	6.3V Ceramic	AC
C934	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1812	VCKYCZ1HB561K	560p	50V Ceramic	AC
C935	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1813	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C937	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1814	VCKYCY1CF104Z	0.1	16V Ceramic	AA
C938	RC-KZ0070TAZZ	4.7	16V Ceramic	AD	C1816	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C939	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C1817	VCKYCY0JB105K	1	6.3V Ceramic	AC
C940	VCKYCY1EF104Z	0.1	25V Ceramic	AA	C1818	VCCCCZ1HH151J	150p	50V Ceramic	AB
C941	RC-KZ0055TAZZ	3.3	10V Ceramic	AD			(VL-H870U/H875U)		
C942	RC-KZ0058TAZZ	1	25V Ceramic	AC	C1818	VCCCCZ1HH101J	100p	50V Ceramic	AB
C945	VCKYCY0JB105K	1	6.3V Ceramic	AC			(VL-H890U)		
C1401	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C1819	VCCCCZ1HH220J	22p	50V Ceramic	AB
C1402	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C1820	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C1403	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C1821	VCCCCZ1HH560J	56p	50V Ceramic	AB
C1404	VCKYCY1CB104K	0.1	16V Ceramic	AB	C1825	VCKYCY1CF224Z	0.22	16V Ceramic	AA
C1405	VCSATE1AJ476M	47	10V Tantalum	AD	C1826	VCCCCZ1HH101J	100p	50V Ceramic	AB
C1406	VCSATE1AJ476M	47	10V Tantalum	AD	C1827	VCKYCY1CF104Z	0.1	16V Ceramic	AA
C1407	VCKYTV1CB474K	0.47	16V Ceramic	AC	C1829	VCKYCY1CF104Z	0.1	16V Ceramic	AA
C1408	VCKYTV1CB474K	0.47	16V Ceramic	AC	C1830	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C1409	VCKYCY1CB104K	0.1	16V Ceramic	AB	C1831	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C1410	VCKYCY1AB474K	0.47	10V Ceramic	AC	C1832	VCKYCY1CF104Z	0.1	16V Ceramic	AA
C1411	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C1840	VCKYTV1EB104K	0.1	25V Ceramic	AB
C1412	VCSATA1AJ106M	10	10V Tantalum	AC	C1901	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C1413	VCKYCZ1CB103K	0.01	16V Ceramic	AB	C1902	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C1414	VCKYTV1AB105K	1	10V Ceramic	AD	C1903	VCKYCZ1HB471K	470p	50V Ceramic	AB
C1415	VCKYCY1AB474K	0.47	10V Ceramic	AC	C1904	VCKYCY1CB473K	0.047	16V Ceramic	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C1905	VCKYCV1HB332K	3300p	50V Ceramic	AA	C5401	VCKYTV1AB105K	1	10V Ceramic	AD
C1906	VCCCCZ1HH101J	100p	50V Ceramic	AB	C5402	RC-KZ0055TAZZ	3.3	10V Ceramic	AD
C1907	VCKYTV1AB105K	1	10V Ceramic	AD	C5403	VCKYCV1HB102K	1000p	50V Ceramic	AB
C1908	VCKYTV1HB103K	0.01	50V Ceramic	AA	C5404	VCKYCV1HB102K	1000p	50V Ceramic	AB
C1909	VCKYCV1AF104Z	0.1	10V Ceramic	AB	C5405	VCKYCV1CB104K	0.1	16V Ceramic	AB
C1910	VCKYCV1AF105Z	1	10V Ceramic	AC	C5406	VCKYCV1CB104K	0.1	16V Ceramic	AB
C1911	VCKYTV1EB104K	0.1	25V Ceramic	AB	C5407	VCKYCV1CB103K	0.01	16V Ceramic	AB
C1912	VCKYTV1HB102K	1000p	50V Ceramic	AA	C5408	VCKYCV1CB104K	0.1	16V Ceramic	AB
C1914	VCKYCV1HB102K	1000p	50V Ceramic	AB	C5409	VCSATA1AJ106M	10	10V Tantalum	AC
C1915	VCKYCV1HB222K	2200p	50V Ceramic	AB	C6401	VCKYTV1AB105K	1	10V Ceramic	AD
C1916	VCKYCV1HB103K	0.01	50V Ceramic	AA	C6402	RC-KZ0070TAZZ	4.7	16V Ceramic	AD
C1918	VCKYCV1AF105Z	1	10V Ceramic	AC	C6403	VCKYCV1CB103K	0.01	16V Ceramic	AB
C1919	VCKYCV1HB102K	1000p	50V Ceramic	AB	C6404	VCSATA1AJ106M	10	10V Tantalum	AC
C1920	VCKYCV1HB102K	1000p	50V Ceramic	AB	C6407	VCKYCV1CB104K	0.1	16V Ceramic	AB
C1921	VCKYCV1AF105Z	1	10V Ceramic	AC	C6408	RC-KZ0070TAZZ	4.7	16V Ceramic	AD
C1922	VCKYCV1HB102K	1000p	50V Ceramic	AB	C6409	VCKYCV1CB103K	0.01	16V Ceramic	AB
C1923	VCKYCV1HB102K	1000p	50V Ceramic	AB	C6410	VCSATA1AJ106M	10	10V Tantalum	AC
C1924	VCKYCV1AF105Z	1	10V Ceramic	AC	C6601	VCKYCV1HB102K	1000p	50V Ceramic	AA
C1925	VCKYCV1AF105Z	1	10V Ceramic	AC	C6602	VCKYCV1HB102K	1000p	50V Ceramic	AA
C1927	VCKYCV1HB102K	1000p	50V Ceramic	AB	C6603	VCKYCV1AF105Z	1	10V Ceramic	AC
C1928	VCKYCV1HB222K	2200p	50V Ceramic	AB	C6604	VCSAPD1CJ105M	1	16V Tantalum	AC
C1929	VCKYCV1AF104Z	0.1	10V Ceramic	AB	C6605	VCKYCV1CB333K	0.033	16V Ceramic	AA
C1930	VCKYTV1EB104K	0.1	25V Ceramic	AB	C6606	VCSAPD1CJ105M	1	16V Tantalum	AC
C1931	VCKYCV1EB223K	0.022	25V Ceramic	AA	C6607	VCSAPD1CJ105M	1	16V Tantalum	AC
C1932	VCKYCV1CB104K	0.1	16V Ceramic	AB	C6608	VCSATA0JJ106M	10	6.3V Tantalum	AD
C1933	VCKYCV1EB223K	0.022	25V Ceramic	AA	C6609	VCSAPD1CJ105M	1	16V Tantalum	AC
C1934	VCKYCV1HB102K	1000p	50V Ceramic	AB	C6610	VCSAPD1CJ105M	1	16V Tantalum	AC
C1935	VCKYCV1HB471K	470p	50V Ceramic	AB	C6611	VCKYCV1CB473K	0.047	16V Ceramic	AA
C1936	VCKYCV1EB223K	0.022	25V Ceramic	AA	C6612	VCKYCV1EB562K	5600p	25V Ceramic	AB
C1937	VCKYCV1CB822K	8200p	16V Ceramic	AB	C6613	VCKYCV1HB103K	0.01	50V Ceramic	AA
C2701	VCKYCV1CB333K	0.033	16V Ceramic	AA	C6614	VCKYCV1CB683K	0.068	16V Ceramic	AC
C2702	VCKYCV1EB682K	6800p	25V Ceramic	AB	C6615	VCKYCV1CB153K	0.015	16V Ceramic	AB
C2703	VCKYCV1HB102K	1000p	50V Ceramic	AA	C6616	VCKYCV1CB153K	0.015	16V Ceramic	AB
C2704	VCKYCV1CF104Z	0.1	16V Ceramic	AA	C6617	VCCCCY1HH471J	470p	50V Ceramic	AA
C2705	VCKYCV1CB104K	0.1	16V Ceramic	AB	C6618	VCSAPD1CJ105M	1	16V Tantalum	AC
C2706	VCSATE1AJ336M	33	10V Tantalum	AG	C6619	VCKYCV1CB333K	0.033	16V Ceramic	AA
C2707	VCKYCV1HF103Z	0.01	50V Ceramic	AA	C6620	VCKYCV1CB473K	0.047	16V Ceramic	AA
C2708	VCKYCV1HF103Z	0.01	50V Ceramic	AA	C6621	VCKYCV1HB103K	0.01	50V Ceramic	AA
C2709	VCKYCV1CF104Z	0.1	16V Ceramic	AA	C6622	VCKYCV1EB562K	5600p	25V Ceramic	AB
C2710	VCKYCV1HF103Z	0.01	50V Ceramic	AA	C6623	VCKYCV1CB683K	0.068	16V Ceramic	AC
C2711	VCKYCV1HF103Z	0.01	50V Ceramic	AA	C6624	VCKYCV1CB153K	0.015	16V Ceramic	AB
C2712	VCKYCV1HF103Z	0.01	50V Ceramic	AA	C6625	VCKYCV1CB153K	0.015	16V Ceramic	AB
C2713	VCKYCV1CF104Z	0.1	16V Ceramic	AA	C6626	VCCCCY1HH471J	470p	50V Ceramic	AA
C2714	VCKYCV1HF103Z	0.01	50V Ceramic	AA	C6627	VCSAPD1AJ225M	2.2	10V Tantalum	AC
C2715	VCCCCY1HH8R0D	8p	50V Ceramic	AA	C6628	VCSATE1AJ336M	33	10V Tantalum	AG
C2716	VCKYCV1HB472K	4700p	50V Ceramic	AA	C6629	VCKYCV1EB562K	5600p	25V Ceramic	AB
C2800	VCKYCV0JB105K	1	6.3V Ceramic	AC	C6630	VCKYCV1EB562K	5600p	25V Ceramic	AB
C2801	VCKYCV1HB102K	1000p	50V Ceramic	AB	C6631	VCKYCV1EB223K	0.022	25V Ceramic	AA
C2802	VCKYCV1HB102K	1000p	50V Ceramic	AB	C6632	VCKYCV1EB562K	5600p	25V Ceramic	AB
C2902	VCKYCV1HB103K	0.01	50V Ceramic	AA	C6633	VCSAPD1CJ105M	1	16V Tantalum	AC
C2903	VCCCCZ1HH101J	100p	50V Ceramic	AB	C6634	VCKYCV1HB102K	1000p	50V Ceramic	AA
C2904	RC-KZ0051TAZZ	1	10V Ceramic	AC	C6635	VCKYCV1HB102K	1000p	50V Ceramic	AA
C2905	VCKYCV1HB103K	0.01	50V Ceramic	AA	C7402	VCKYCV1CB103K	0.01	16V Ceramic	AB
C2906	VCKYCV1CB104K	0.1	16V Ceramic	AB	C7404	VCCCCZ1HH120J	12p	50V Ceramic	AB
C3701	VCKYCV1HF103Z	0.01	50V Ceramic	AA	C7405	VCCCCZ1HH330J	33p	50V Ceramic	AB
C3702	VCKYCV1HF103Z	0.01	50V Ceramic	AA	C7406	VCCCCZ1HH470J	47p	50V Ceramic	AB
C4401	VCKYTV1AB105K	1	10V Ceramic	AD	C7407	VCCCCZ1HH680J	68p	50V Ceramic	AB
C4402	RC-KZ0055TAZZ	3.3	10V Ceramic	AD	C7408	VCCCCZ1HH151J	150p	50V Ceramic	AB
C4403	VCKYCV1HB102K	1000p	50V Ceramic	AB	C7410	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4404	VCKYCV1HB102K	1000p	50V Ceramic	AB	C7411	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4405	VCKYCV1CB104K	0.1	16V Ceramic	AB	C7413	VCKYTV1AB105K	1	10V Ceramic	AD
C4406	VCKYCV1CB104K	0.1	16V Ceramic	AB	C7451	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4407	VCKYCV1CB103K	0.01	16V Ceramic	AB	C7454	VCSATA1AJ106M	10	10V Tantalum	AC
C4408	VCKYCV1CB104K	0.1	16V Ceramic	AB	C7455	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4409	VCSATA1AJ106M	10	10V Tantalum	AC	C7456	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4410	VCSATA1AJ106M	10	10V Tantalum	AC	C7457	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4411	VCCCCZ1HH150J	15p	50V Ceramic	AB	C7458	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4412	VCSATA1AJ106M	10	10V Tantalum	AC	C7459	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4413	VCCCCZ1HH150J	15p	50V Ceramic	AB	C7460	VCCCCZ1HH680J	68p	50V Ceramic	AB
C4414	VCKYCV1CB104K	0.1	16V Ceramic	AB	C7461	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4701	VCKYCV1CF104Z	0.1	16V Ceramic	AA	C7462	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4702	VCKYCV1CF104Z	0.1	16V Ceramic	AA	C7463	VCCCCZ1HH101J	100p	50V Ceramic	AB
C4703	VCKYCV1CF104Z	0.1	16V Ceramic	AA	C7464	VCCCCZ1HH330J	33p	50V Ceramic	AB
C4704	VCKYCV1CF104Z	0.1	16V Ceramic	AA	C7465	VCKYCV1CB103K	0.01	16V Ceramic	AB
C4705	VCKYCV1CF104Z	0.1	16V Ceramic	AA	C7466	VCKYCV1CB103K	0.01	16V Ceramic	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C8303	VCCCCZ1HH100D	10p	50V Ceramic	AB	R461	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
C8304	VCCCCZ1HH100D	10p	50V Ceramic	AB	R463	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA
C8305	VCCCCZ1HH150J	15p	50V Ceramic	AB	R465	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA
C8306	VCCCCZ1HH150J	15p	50V Ceramic	AB	R466	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
C8307	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R467	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C8308	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R601	VRK-SA1JF561J	560	1/16W	AC
C8309	VCKYCZ1CB103K	0.01	16V Ceramic	AB				Metal Composition	
C8310	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R602	VRK-SA1JF224J	220k	1/16W	AC
C8311	VCKYCZ1CB103K	0.01	16V Ceramic	AB				Metal Composition	
C8312	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R604	VRK-SA1JF474J	470k	1/16W	AC
C8313	VCKYCZ1CB103K	0.01	16V Ceramic	AB				Metal Composition	
C8314	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R606	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C8315	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R607	VRK-SA1JF153J	15k	1/16W	AD
C8316	VCSATA1AJ106M	10	10V Tantalum	AC				Metal Composition	
C8317	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R608	VRK-SA1JF561J	560	1/16W	AC
C8320	VCKYCZ1CB103K	0.01	16V Ceramic	AB				Metal Composition	
C8321	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R609	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
C8356	VCCCCZ1HH100D	10p	50V Ceramic	AB	R610	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
C8358	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R611	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
C8359	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R612	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C8361	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R613	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C8362	VCCCCZ1HH121J	120p	50V Ceramic	AB	R614	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
C8363	VCCCCZ1HH820J	82p	50V Ceramic	AB	R615	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C8364	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R616	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
C8365	VCKYCZ1HB471K	470p	50V Ceramic	AB	R617	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA
C8401	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R618	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
C8402	VCCCCZ1HH100D	10p	50V Ceramic	AB	R620	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
C8403	VCCCCY1HH271J	270p	50V Ceramic	AA	R621	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C8404	VCKYCZ1HB332K	3300p	50V Ceramic	AA	R622	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C8405	VCCCCZ1HH360J	36p	50V Ceramic	AA	R623	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
C8406	VCCCCY1HH271J	270p	50V Ceramic	AA	R626	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
C8407	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R627	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
C8408	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R628	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C8409	VCKYTV1AB105K	1	10V Ceramic	AD	R629	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C8411	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R630	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA
C8452	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R631	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA
C8453	VCKYCZ1CB103K	0.01	16V Ceramic	AB	R632	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA
C9601	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R642	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
					R643	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
					R644	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
					R645	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
					R646	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
					R649	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
					R650	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
					R651	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
					R652	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
					R653	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
					R701	VRK-SA1JF102J	1k	1/16W	AB
								Metal Composition	
					R703	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
					R704	VRK-SA1JF102J	1k	1/16W	AB
								Metal Composition	
					R706	VRK-SA1JF102J	1k	1/16W	AB
								Metal Composition	
					R708	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
					R709	VRK-SA1JF102J	1k	1/16W	AB
								Metal Composition	
					R712	VRK-SA1JF102J	1k	1/16W	AB
								Metal Composition	
					R714	VRK-SA1JF102J	1k	1/16W	AB
								Metal Composition	
					R716	VRK-SA1JF104J	100k	1/16W	AB
								Metal Composition	
					R719	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
					R720	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA
					R721	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA
					R722	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA
					R723	VRK-SA1JF104J	100k	1/16W	AB
								Metal Composition	
					R725	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
					R726	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
					R727	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
					R728	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
					R729	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
					R730	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA

RESISTORS

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R731	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA	R845	VRS-CZ1JF823D		82k 1/16W Metal Oxide	AB
R732	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA				(VL-H890U)	
R733	VRS-CZ1JF682J		6.8k 1/16W Metal Oxide	AA	R846	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R734	VRS-CZ1JF563D		56k 1/16W Metal Oxide	AA	R847	VRS-CZ1JF563D		56k 1/16W Metal Oxide	AA
R735	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA	R848	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R736	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA	R850	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R737	VRS-CZ1JF334J		330k 1/16W Metal Oxide	AA	R851	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R738	VRS-CZ1JF154J		150k 1/16W Metal Oxide	AA	R852	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R739	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA	R853	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R740	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA	R854	VRS-CZ1JF563J		56k 1/16W Metal Oxide	AA
R741	VRK-SA1JF104J		100k 1/16W Metal Composition	AB	R855	VRS-CZ1JF123D		12k 1/16W Metal Oxide	AA
					R860	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
R743	VRK-SA1JF104J		100k 1/16W Metal Composition	AB	R901	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA
					R902	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R745	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA	R903	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R746	VRK-SA1JF102J		1k 1/16W Metal Composition	AB	R905	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
					R906	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R748	VRK-SA1JF102J		1k 1/16W Metal Composition	AB	R907	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
					R908	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R749	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA	R909	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R751	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA	R910	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R752	VRK-SA1JF102J		1k 1/16W Metal Composition	AB	R911	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
					R912	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R754	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA	R913	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R755	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA	R914	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA
R756	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA	R915	VRS-CZ1JF753J		75k 1/16W Metal Oxide	AA
R757	VRS-CZ1JF224J		220k 1/16W Metal Oxide	AA	R916	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R758	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA	R917	VRS-CZ1JF753J		75k 1/16W Metal Oxide	AA
R759	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA	R918	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA
R760	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA	R919	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R761	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA	R920	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R762	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA	R921	VRS-CZ1JF333J		33k 1/16W Metal Oxide	AA
R763	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA	R922	VRS-CZ1JF104J		100k 1/16W Metal Oxide	AA
R764	VRS-CZ1JF220J		22 1/16W Metal Oxide	AA	R923	VRS-CZ1JF273J		27k 1/16W Metal Oxide	AA
R765	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA	R924	VRS-CZ1JF393J		39k 1/16W Metal Oxide	AA
R766	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA	R925	VRS-CZ1JF753J		75k 1/16W Metal Oxide	AA
R767	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA	R926	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R768	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA	R927	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R769	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA	R928	VRS-CZ1JF681J		680 1/16W Metal Oxide	AA
R770	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA	R929	VRS-CZ1JF121D		120 1/16W Metal Oxide	AB
R771	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA	R930	VRS-CY1JFR22J		0.22 1/16W Metal Oxide	AA
R772	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA	R936	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA
R773	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA	R942	VRS-CZ1JF683D		68k 1/16W Metal Oxide	AB
R774	VRS-TV1JD000J		0 1/16W Metal Oxide	AA	R943	VRS-CZ1JF472D		4.7k 1/16W Metal Oxide	AB
R775	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA	R944	VRS-CZ1JF222J		2.2k 1/16W Metal Oxide	AA
R776	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA	R945	VRS-CZ1JF273D		27k 1/16W Metal Oxide	AA
R777	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA	R946	VRS-CZ1JF182D		1.8k 1/16W Metal Oxide	AB
R778	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA	R947	VRS-CZ1JF752D		7.5k 1/16W Metal Oxide	AA
R779	VRS-CZ1JF123J		12k 1/16W Metal Oxide	AA	R948	VRS-CZ1JF472D		4.7k 1/16W Metal Oxide	AB
R800	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA	R949	VRS-CZ1JF472D		4.7k 1/16W Metal Oxide	AB
R801	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA	R950	VRS-CZ1JF472J		4.7k 1/16W Metal Oxide	AA
R802	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA	R951	VRS-CZ1JF222D		2.2k 1/16W Metal Oxide	AA
R803	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA	R952	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R804	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA	R953	VRS-TQ2BD000J		0 1/8W Metal Oxide	AA
R805	VRS-CZ1JF304D		300k 1/16W Metal Oxide	AA	R963	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R806	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA	R1401	VRS-CZ1JF102D		1k 1/16W Metal Oxide	AA
R807	VRS-CZ1JF823J		82k 1/16W Metal Oxide	AA	R1402	VRS-CZ1JF331D		330 1/16W Metal Oxide	AA
R812	VRS-CZ1JF393D		39k 1/16W Metal Oxide	AB	R1403	VRS-CZ1JF332J		3.3k 1/16W Metal Oxide	AA
R815	VRS-CZ1JF102J		1k 1/16W Metal Oxide	AA	R1404	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R820	VRS-CZ1JF273D		27k 1/16W Metal Oxide	AA	R1407	VRS-CZ1JF473J		47k 1/16W Metal Oxide	AA
R824	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA	R1408	VRS-CZ1JF000J		0 1/16W Metal Oxide	AA
R826	VRS-CZ1JF124J		120k 1/16W Metal Oxide	AA	R1409	VRS-CZ1JF103D		10k 1/16W Metal Oxide	AB
R827	VRS-CZ1JF223J		22k 1/16W Metal Oxide	AA	R1411	VRS-CZ1JF223D		22k 1/16W Metal Oxide	AB
R828	VRS-CZ1JF163J		16k 1/16W Metal Oxide	AA	R1412	VRS-CZ1JF751D		750 1/16W Metal Oxide	AB
R829	VRS-CZ1JF222D		2.2k 1/16W Metal Oxide	AA	R1413	VRS-CZ1JF102D		1k 1/16W Metal Oxide	AA
R830	VRS-CZ1JF183D		18k 1/16W Metal Oxide	AB	R1414	VRS-CZ1JF102D		1k 1/16W Metal Oxide	AA
R832	VRS-CZ1JF334J		330k 1/16W Metal Oxide	AA	R1415	VRS-CZ1JF102D		1k 1/16W Metal Oxide	AA
R833	VRS-CZ1JF562J		5.6k 1/16W Metal Oxide	AA	R1417	VRS-CZ1JF392J		3.9k 1/16W Metal Oxide	AA
R834	VRS-CZ1JF334J		330k 1/16W Metal Oxide	AA	R1418	VRS-CZ1JF392J		3.9k 1/16W Metal Oxide	AA
R835	VRS-CZ1JF822J		8.2k 1/16W Metal Oxide	AA	R1601	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA
R837	VRS-CZ1JF103J		10k 1/16W Metal Oxide	AA	R1602	VRS-CY1JF563J		56k 1/16W Metal Oxide	AA
R842	VRS-CZ1JF105J		1M 1/16W Metal Oxide	AA	R1603	VRS-CZ1JF122J		1.2k 1/16W Metal Oxide	AA
R845	VRS-CZ1JF473D		47k 1/16W Metal Oxide	AB	R1604	VRS-CZ1JF152J		1.5k 1/16W Metal Oxide	AA
			(VL-H870U/H875U)		R1606	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA
					R1607	VRS-CZ1JF183J		18k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R1609	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R1907	VRS-CZ1JF243D	24k	1/16W Metal Oxide	
R1610	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA			(VL-H890U)		
R1611	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R1908	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
R1613	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R1909	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1618	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R1910	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
R1619	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	R1911	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1800	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1912	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1801	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	R1913	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R1802	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB	R1914	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R1803	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA	R1915	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
R1804	VRS-CZ1JF222D	2.2k	1/16W Metal Oxide	AA	R1916	VRS-CZ1JF562D	5.6k	1/16W Metal Oxide	AB
R1805	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	R1917	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
R1806	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA	R1918	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
R1807	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	R1919	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R1808	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB	R1920	VRS-CZ1JF472D	4.7k	1/16W Metal Oxide	AB
R1809	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R1921	VRS-CZ1JF393D	39k	1/16W Metal Oxide	AB
R1810	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R1922	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB
R1811	VRS-CZ1JF512J	5.1k	1/16W Metal Oxide	AB	R1923	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
R1812	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R1924	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1813	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R1925	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB
R1814	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R1926	VRS-CZ1JF222D	2.2k	1/16W Metal Oxide	AA
R1815	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R1927	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1816	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R1928	VRS-CZ1JF562D	5.6k	1/16W Metal Oxide	AB
R1817	VRS-CZ1JF562D	5.6k	1/16W Metal Oxide	AB	R1929	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB
R1818	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1930	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R1819	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1931	VRS-CZ1JF223D	22k	1/16W Metal Oxide	AB
R1820	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA	R1932	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
R1821	VRS-CZ1JF124J	120k	1/16W Metal Oxide	AA	R1933	VRS-CZ1JF681D	680	1/16W Metal Oxide	AB
R1822	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R1934	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R1823	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R1935	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AB
R1824	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R1936	VRS-CZ1JF563D	56k	1/16W Metal Oxide	AA
R1825	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R1937	VRS-CZ1JF182D	1.8k	1/16W Metal Oxide	AB
R1826	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA	R1938	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1828	VRS-CZ1JF564J	560k	1/16W Metal Oxide	AA	R1939	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1831	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R1940	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1832	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA	R1941	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1833	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1942	VRS-CZ1JF331J	330	1/16W Metal Oxide	AA
R1835	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R1943	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB
R1837	VRK-SB1FF471J	470	0.0315W	AB	R1944	VRS-CZ1JF223D	22k	1/16W Metal Oxide	AB
			Metal Composition		R1945	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1839	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1947	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
			(VL-H870U/H870UA/H870UC/ H870UW/H875U)		R1948	VRS-CZ1JF182D	1.8k	1/16W Metal Oxide	AB
R1844	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R1949	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA
R1846	VRK-SB1FF471J	470	0.0315W	AB	R1950	VRS-CZ1JF393D	39k	1/16W Metal Oxide	AB
			Metal Composition		R1951	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB
R1847	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	R1952	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1849	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	R1953	VRS-CZ1JF391J	390	1/16W Metal Oxide	AA
R1851	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R1954	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1853	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R1955	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1854	VRS-CZ1JF303D	30k	1/16W Metal Oxide	AA	R2701	VRS-CZ1JF224J	220k	1/16W Metal Oxide	AA
			(VL-H870U/H870UA/H870UC/ H870UW/H875U)		R2702	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R1854	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AA	R2703	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
			(VL-H890U)		R2704	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1855	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R2705	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1856	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	R2706	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1857	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R2707	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1858	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R2708	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R1859	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R2709	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R1860	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2710	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R1863	VRS-CZ1JF273D	27k	1/16W Metal Oxide	AA	R2711	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA
R1864	VRS-CZ1JF183D	18k	1/16W Metal Oxide	AB	R2807	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1866	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	R2815	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1867	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	R2816	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R1872	VRS-CZ1JF100J	10	1/16W Metal Oxide	AA	R2817	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R1901	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2818	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1902	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R2819	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1903	VRS-CZ1JF473D	47k	1/16W Metal Oxide	AB	R2820	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R1904	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	R2821	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1905	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA	R2901	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
R1906	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	R2902	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R1907	VRS-CZ1JF333D	33k	1/16W Metal Oxide	AB	R2903	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
			(VL-H870U/H875U)		R2905	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
					R2906	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA
					R2907	VRS-TQ2BD101J	100	1/8W Metal Oxide	AA
					R2908	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R2910	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R6613	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
R2911	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R6614	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R2912	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R6615	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
R2913	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R6616	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R2914	VRS-CZ1JF184D	180k	1/16W Metal Oxide	AB	R6617	VRS-CZ1JF154J	150k	1/16W Metal Oxide	AA
R2915	VRS-CZ1JF104D	100k	1/16W Metal Oxide	AB	R6618	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R2921	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA	R6619	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R2922	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA	R6620	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R2923	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA	R6621	VRS-CZ1JF154J	150k	1/16W Metal Oxide	AA
R2925	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA	R6622	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R2927	VRS-CZ1JF684J	680k	1/16W Metal Oxide	AA	R6623	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R2928	VRS-CZ1JF684J	680k	1/16W Metal Oxide	AA	R6625	VRS-CZ1JF154J	150k	1/16W Metal Oxide	AA
R2930	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA	R6627	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R2931	VRS-CZ1JF823J	82k	1/16W Metal Oxide	AA	R6628	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R2933	VRS-CZ1JF1R0J	1	1/16W Metal Oxide	AA	R7401	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R2934	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA	R7402	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA
R2935	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R7403	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R3701	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R7404	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R4401	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	R7405	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R4402	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	R7406	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R4403	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R7407	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R4404	VRS-CZ1JF102D	1k	1/16W Metal Oxide	AA	R7408	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R4405	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB	R7409	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R4406	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R7410	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R4409	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R7411	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R4410	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R7412	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R4411	VRS-CZ1JF681J	820	1/16W Metal Oxide	AA	R7413	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R4412	VRS-CZ1JF911J	910	1/16W Metal Oxide	AA	R7457	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R4413	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA	R7458	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R4414	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA	R7459	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R4415	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA	R7460	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R4416	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R7461	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
R4417	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R7462	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R4418	VRS-CZ1JF911J	910	1/16W Metal Oxide	AA	R7463	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R4419	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA	R7464	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R4420	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA	R7465	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R4421	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R7466	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
R4423	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R7467	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R4701	VRS-TV1JD000J	0	1/16W Metal Oxide	AA	R7468	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R4702	VRS-TV1JD000J	0	1/16W Metal Oxide	AA	R7469	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA
R4703	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R7470	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA
R4704	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	R7471	VRS-CZ1JF512J	5.1k	1/16W Metal Oxide	AB
R5401	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA	R7472	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R5402	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	R7473	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA
R5403	VRS-CZ1JF102D	1k	1/16W Metal Oxide	AA	R7474	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R5404	VRS-CZ1JF823D	82k	1/16W Metal Oxide	AB	R7475	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6401	VRS-CZ1JF360D	36	1/16W Metal Oxide	AA	R7479	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA
R6402	VRS-CZ1JF360D	36	1/16W Metal Oxide	AA	R7480	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R6403	VRS-CZ1JF360D	36	1/16W Metal Oxide	AA	R7482	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R6404	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R8301	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R6405	VRS-CZ1JF390D	39	1/16W Metal Oxide	AA	R8303	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R6406	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA	R8305	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6407	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	R8306	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6408	VRS-CZ1JF362J	3.6k	1/16W Metal Oxide	AA	R8307	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6409	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R8312	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R6410	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R8315	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R6411	VRS-CZ1JF390D	39	1/16W Metal Oxide	AA	R8318	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R6417	VRS-CZ1JF390D	39	1/16W Metal Oxide	AA	R8320	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA
R6418	VRS-CZ1JF181J	180	1/16W Metal Oxide	AA	R8325	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
R6419	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA	R8326	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R6420	VRS-CZ1JF362J	3.6k	1/16W Metal Oxide	AA	R8327	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R6421	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	R8328	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R6422	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	R8329	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R6601	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R8359	VRS-CZ1JF391J	390	1/16W Metal Oxide	AA
R6602	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R8360	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R6603	VRS-CZ1JF332D	3.3k	1/16W Metal Oxide	AA	R8361	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
R6604	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	R8362	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
R6605	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	R8363	VRS-CZ1JF271J	270	1/16W Metal Oxide	AA
R6606	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	R8365	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R6607	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	R8366	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R6608	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA	R8367	VRS-CZ1JF331J	330	1/16W Metal Oxide	AA
R6609	VRS-CZ1JF333J	33k	1/16W Metal Oxide	AA	R8370	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R6610	VRS-CZ1JF332D	3.3k	1/16W Metal Oxide	AA	R8374	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R6611	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	R8375	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R6612	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB	R8377	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
R8379	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R9496	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R8380	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	R9499	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R8381	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R9601	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R8382	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R9901	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R8383	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA	R9904	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R8384	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	R9905	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R8385	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	R9907	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R8386	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	R9909	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R8401	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	MISCELLANEOUS PARTS				
R8402	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	PSLDM9146TAZZ	Shield		AE	
R8403	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	PSLDM9147TAZZ	Shield		AC	
R8404	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	QCNW-1901TAZZ	Connecting Cord		AD	
R8405	VRS-CZ1JF132J	1.3k	1/16W Metal Oxide	AA	QCNW-1902TAZZ	Connecting Cord		AD	
R8406	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	CN1800	QSOCN2486TAZZ	Socket, 24pin	AE	
R8407	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	CN2800	QSOCN0686TAZZ	Socket(VL-H890U)	AC	
R8408	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	CN2801	QSOCN0607REN1	Socket, 6pin (VL-H870U/ H870UA/H870UC/H870UW/H875U)	AC	
R8409	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	CN2802	QSOCN0860TAZZ	Socket, 8pin	AE	
R8410	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA	CN7401	QCNCM7068TAZZ	Connector, 70pin	AG	
R8411	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	FB1801	RBLN-0028TAZZ	Balun	AB	
R8413	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA	P902	QPLGN0364TAZZ	Plug, 6pin	AC	
R8414	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	P2901	QPLGN0664TAZZ	Plug, 8pin	AD	
R8415	VRS-CZ1JF272J	2.7k	1/16W Metal Oxide	AA	P2902	QPLGN0863TAZZ	Plug, 3pin	AD	
R8416	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA	P6601	QPLGN0364TAZZ	Plug, 2pin	AC	
R8417	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA	P7401	QPLGN0264TAZZ	Plug, 3pin	AC	
R8418	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA	SC601	QSOCN2292TAZZ	Socket, 22pin	AE	
R8419	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	SC901	QSOCN0787TAZZ	Socket, 7pin	AC	
R8420	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	SC902	QSOCN1986TAZZ	Socket, 19pin	AF	
R8422	VRS-CZ1JF152J	1.5k	1/16W Metal Oxide	AA	SC903	QSOCN1886TAZZ	Socket, 18pin	AD	
R8424	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	SLD2	PSLDM3238TAFW	Shield	AC	
R8451	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	DUNTK2889QA00 CAMERA1 UNIT				
R8453	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	INTEGRATED CIRCUITS				
R8454	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA	IC11	VHiUPD16510-1	UPD16510	AR	
R8455	VRS-CZ1JF821J	820	1/16W Metal Oxide	AA	IC12	VHiLR38592/-1	LR38592	AN	
R8456	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	IC101	VHiCXA2096N-1	CXA2096N	AQ	
R8457	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	IC151	VHiADS933Y/-1	ADS933Y	AR	
R9401	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	IC152	VHiTC7SH08U-1	TC7SH08U	AF	
R9402	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	IC501	RH-iX0703TAZZ	IX0703TA	AW	
R9403	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	IC502	VHiMB8346BV-1	MB8346BV	AN	
R9404	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	IC503	VHiPST597KN-1	PST597KN	AF	
R9405	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	IC551	VHiMM1298XQ-1	MM1298XQ	AV	
R9406	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	IC552	VHiNJM2902V-1	NJM2902V	AD	
R9407	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	IC553	VHiNJM3414V-1	NJM3414V	AF	
R9408	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	TRANSISTORS				
R9410	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	Q11	VSHN2C01FU/-1	HN2C01FU	AC	
R9411	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	Q552	VSRT1P140U/-1	RT1P140U	AB	
R9412	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	DIODES				
R9414	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA	D501	VHDDA121///-1	DA121	AA	
R9415	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	D551	VHDDA121///-1	DA121	AA	
R9416	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA	PACKAGED CIRCUIT				
R9417	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	X11	RCRSZ0048TAZZ	Crystal	AN	
R9429	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA		or			
R9430	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA		RCRSZ0036TAZZ	Crystal	AN	
R9431	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	COILS				
R9434	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	L11	VPCQM470K1R9N	Peaking 47μH	AC	
R9437	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA	L12	VPBWM100KR50N	Peaking 10μH	AC	
R9438	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA	L101	VPBWM100KR50N	Peaking 10μH	AC	
R9440	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	L102	VPBWM100KR50N	Peaking 10μH	AC	
R9441	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA	L151	VPBWM100KR50N	Peaking 10μH	AC	
R9442	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	L501	VPBWM100KR50N	Peaking 10μH	AC	
R9443	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA	L551	VPBWM220K1R2N	Peaking 22μH	AC	
R9444	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	L552	VPBWM220K1R2N	Peaking 22μH	AC	
R9445	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA	CAPACITORS				
R9446	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA	C11	VCKYCZ1HF103Z	0.01 50V Ceramic	AB	
R9447	VRS-CZ1JF243J	24k	1/16W Metal Oxide	AA	C12	VCKYCZ1HF103Z	0.01 50V Ceramic	AB	
R9448	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA					
R9449	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA					
R9451	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA					
R9452	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA					
R9455	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R9457	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R9458	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA					
R9459	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA					
R9493	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R9494	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					
R9495	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
C13	VCSATA1DJ475M	4.7	20V Tantalum	AC	R102	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C14	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R103	VRS-CZ1JF244D	240k	1/16W Metal Oxide	AA
C15	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R106	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C16	VCSATJ1VJ685M	6.8	35V Tantalum	AE	R107	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C17	VCCCCZ1HH470J	47p	50V Ceramic	AB	R108	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
C18	VCCCCZ1HH470J	47p	50V Ceramic	AB	R109	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
C19	VCCCCZ1HH470J	47p	50V Ceramic	AB	R110	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C20	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R111	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
C21	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R154	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA
C22	VCSATA1AJ106M	10	10V Tantalum	AC	R162	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
C23	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R501	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C24	VCSATA1AJ106M	10	10V Tantalum	AC	R503	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
C25	VCKYCZ1HB102K	1000p	50V Ceramic	AB	R504	VRK-SA1JF102J	1k	1/16W	AB
C26	VCSATA1AJ106M	10	10V Tantalum	AC			Metal Composition		
C27	VCCCCZ1HH6R0D	6p	50V Ceramic	AA	R505	VRK-SA1JF102J	1k	1/16W	AB
C28	VCKYCZ1HF103Z	0.01	50V Ceramic	AB			Metal Composition		
C29	VCCCCZ1HH820J	82p	50V Ceramic	AB	R508	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C102	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R509	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C103	VCKYCZ1EF223Z	0.022	25V Ceramic	AB	R510	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C104	VCKYTV1AB105K	1	10V Ceramic	AD	R512	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C105	VCKYTV1AB105K	1	10V Ceramic	AD	R516	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C106	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R517	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C107	VCSATA1AJ106M	10	10V Tantalum	AC	R518	VRS-CZ1JF153J	15k	1/16W Metal Oxide	AA
C108	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R519	VRK-SA1JF102J	1k	1/16W	AB
C109	VCKYCZ1HF103Z	0.01	50V Ceramic	AB			Metal Composition		
C154	VCCCCZ1HH470J	47p	50V Ceramic	AB	R521	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C155	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R522	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C156	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R523	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C157	VCSATA0JJ156M	15	6.3V Tantalum	AC	R524	VRK-SA1JF103J	10k	1/16W	AB
C158	VCSATA1AJ106M	10	10V Tantalum	AC			Metal Composition		
C159	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R528	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C160	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R529	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C161	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R530	VRK-SA1JF102J	1k	1/16W	AB
C162	VCCCCZ1HH470J	47p	50V Ceramic	AB			Metal Composition		
C163	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R532	VRS-CZ1JF203J	20k	1/16W Metal Oxide	AA
C164	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R533	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C165	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R537	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C501	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R538	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
C502	VCSATA1AJ106M	10	10V Tantalum	AC	R561	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C503	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R563	VRS-CZ1JF223J	22k	1/16W Metal Oxide	AA
C504	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R569	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C505	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R570	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
C551	VCSATE1CJ156M	15	16V Tantalum	AD	R571	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
C553	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R573	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C554	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R574	VRS-CZ1JF912J	9.1k	1/16W Metal Oxide	AB
C555	VCKYCY0JF105Z	1	6.3V Ceramic	AB	R575	VRS-CZ1JF104J	100k	1/16W Metal Oxide	AA
C559	VCSATA1AJ106M	10	10V Tantalum	AC	R576	VRS-CZ1JF393J	39k	1/16W Metal Oxide	AA
C560	VCSATA1AJ106M	10	10V Tantalum	AC	R577	VRS-CZ1JF102J	1k	1/16W Metal Oxide	AA
C561	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R578	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
C562	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R581	VRS-CZ1JF562J	5.6k	1/16W Metal Oxide	AA
C563	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R582	VRS-CZ1JF334D	330k	1/16W Metal Oxide	AA
C564	VCKYCZ1AF104Z	0.1	10V Ceramic	AB	R583	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA
C565	VCSATA1AJ106M	10	10V Tantalum	AC	R584	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA
C566	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R585	VRS-CZ1JF221J	220	1/16W Metal Oxide	AA
C567	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R586	VRS-CZ1JF103D	10k	1/16W Metal Oxide	AB
C568	VCCCCZ1HH151J	150p	50V Ceramic	AB	R587	VRS-CZ1JF122J	1.2k	1/16W Metal Oxide	AA
C569	VCKYCY0JF105Z	1	6.3V Ceramic	AB	R588	VRS-CZ1JF472J	4.7k	1/16W Metal Oxide	AA
C570	VCKYCZ1HF103Z	0.01	50V Ceramic	AB	R589	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
FL13	RC-JZ0001TAZZ		Capacitor	AC	R590	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
RESISTORS					R591	VRS-CZ1JF474J	470k	1/16W Metal Oxide	AA
R13	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R592	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
R14	VRS-CZ1JF330J	33	1/16W Metal Oxide	AA	R593	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
R16	VRS-CZ1JF680J	68	1/16W Metal Oxide	AB	R594	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R17	VRS-CZ1JF680J	68	1/16W Metal Oxide	AB	R595	VRS-CZ1JF272D	2.7k	1/16W Metal Oxide	AB
R20	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R596	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB
R21	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R597	VRS-CZ1JF244D	240k	1/16W Metal Oxide	AA
R26	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R598	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R27	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	R599	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R28	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA	MISCELLANEOUS PARTS				
R29	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA	SC2	QSOCN1986TAZZ	Socket, 19pin		AF
R30	VRS-CZ1JF183J	18k	1/16W Metal Oxide	AA	SC3	QSOCN1886TAZZ	Socket, 18pin		AD
R31	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA	SC6	QSOCN2086TAZZ	Socket, 20pin		AD
R32	VRS-CZ1JF561J	560	1/16W Metal Oxide	AA	CN1	QCNCW7089TAZZ	Connector, 70pin		AG
R101	VRS-CZ1JF153D	15k	1/16W Metal Oxide	AB					

Ref. No.	Part No.	★	Description	Code
DUNTK2892QA00 CAMERA2 UNIT				
INTEGRATED CIRCUITS				
IC201	RH-iX0470TAZZ		HG73C002TE	AY
IC251	RH-iX0490TAZZ		IX0490TA	BB
IC252	VHiMS548331-1		MSM548331TS-K	BD
TRANSISTORS				
Q201	VSHN2C01FU/-1		HN2C01FU	AC
Q202	VSHN2A01FU/-1		HN2A01FU	AC
Q203	VS2SC5383F/-1		2SC5383F	AB
COILS				
L201	VPBWM100KR50N		Peaking 10μH	AC
L202	VPCQM470K1R9N		Peaking 47μH	AC
L203	VPD9M100J1R7N		Peaking 10μH	AC
L205	VPD9M3R9J1R3N		Peaking 3.9μH	AC
L207	VPBWM100KR50N		Peaking 10μH	AC
L251	VPBWM100KR50N		Peaking 10μH	AC
L252	VPBWM100KR50N		Peaking 10μH	AC
CAPACITORS				
C202	VCCCCZ1HH100D	10p	50V Ceramic	AB
C205	VCCCCZ1HH750J	75p	50V Ceramic	AB
C206	RC-KZ0051TAZZ	1	10V Ceramic	AC
C207	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C208	VCSATA1AJ106M	10	10V Tantalum	AC
C211	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C212	RC-KZ0051TAZZ	1	10V Ceramic	AC
C213	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C214	VCKYCZ1HB222K	2200p	50V Ceramic	AB
C215	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C217	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C218	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C219	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C220	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C221	VCKYCZ1HB222K	2200p	50V Ceramic	AB
C222	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C223	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C228	RC-KZ0051TAZZ	1	10V Ceramic	AC
C229	VCSATA0JJ156M	15	6.3V Tantalum	AC
C230	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C231	VCKYCZ1HB102K	1000p	50V Ceramic	AB
C251	VCSATA0JJ156M	15	6.3V Tantalum	AC
C252	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C253	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C254	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C255	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C256	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C257	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C258	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C259	VCKYCZ1AF104Z	0.1	10V Ceramic	AB
C260	VCSATA0JJ156M	15	6.3V Tantalum	AC
C261	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
RESISTORS				
R201	VRS-CZ1JF182J	1.8k	1/16W Metal Oxide	AA
R202	VRS-CZ1JF681J	680	1/16W Metal Oxide	AA
R205	VRS-CZ1JF273J	27k	1/16W Metal Oxide	AA
R206	VRS-CZ1JF123J	12k	1/16W Metal Oxide	AA
R207	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R208	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R209	VRS-CZ1JF683J	68k	1/16W Metal Oxide	AA
R210	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R212	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R213	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R214	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R216	VRS-CZ1JF822J	8.2k	1/16W Metal Oxide	AA
R217	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R218	VRS-CZ1JF103J	10k	1/16W Metal Oxide	AA
R219	VRS-CZ1JF682J	6.8k	1/16W Metal Oxide	AA
R220	VRS-CZ1JF471J	470	1/16W Metal Oxide	AA
R221	VRK-SA1JF224J	220k	1/16W Metal Composition	AC

Ref. No.	Part No.	★	Description	Code
R222	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R252	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R254	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
R256	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
MISCELLANEOUS PARTS				
FB201	RBLN-0120TAZZ		Balun	AC
FB202	RBLN-0120TAZZ		Balun	AC
P201	QPLGN0258REZZ		Plug, 2pin	AD
SC4	QSOCN1986TAZZ		Socket, 19pin	AF
SC5	QSOCN0860TAZZ		Socket, 18pin	AE
SC9	QSOCN1860TAZZ		Socket, 18pin	AE
CN2	QCNCM7058TAZZ		Connector, 70pin	AG
DUNTK2895PM00 CCD UNIT				
INTEGRATED CIRCUIT				
IC2	VHiS24C08A/-1		S24C08A	AG
TRANSISTORS				
Q1	VS2SK508///-1		2SK508	AE
Q2	VS2SC4627CD-1		2SC4627CD	AB
DIODE				
D1	VHDDA121///-1		DA121	AA
CAPACITORS				
C1	VCSATE1VJ335M	3.3	35V Tantalum	AD
C2	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
C3	RC-KZ0056TAZZ		Capacitor	AD
C4	VCKYTV1CF105Z	1	16V Ceramic	AB
C5	VCKYTV1HB102K	1000p	50V Ceramic	AA
C6	VCCCCZ1HH221J	220p	50V Ceramic	AB
C7	VCKYTV1EB104K	0.1	25V Ceramic	AB
C8	VCKYCZ1HF103Z	0.01	50V Ceramic	AB
RESISTORS				
R1	VRS-CZ1JF222J	2.2k	1/16W Metal Oxide	AA
R2	VRS-CZ1JF101J	100	1/16W Metal Oxide	AA
R3	VRS-CZ1JF332J	3.3k	1/16W Metal Oxide	AA
R4	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R5	VRS-CZ1JF473J	47k	1/16W Metal Oxide	AA
R6	VRS-CZ1JF392J	3.9k	1/16W Metal Oxide	AA
R7	VRS-CZ1JF105J	1M	1/16W Metal Oxide	AA
R8	VRS-CZ1JF000J	0	1/16W Metal Oxide	AA
MISCELLANEOUS PARTS				
SC1	QSOCN1986TAZZ		Socket, 19pin	AF
RAMP-0031TAN0 HEAD AMP UNIT				
INTEGRATED CIRCUITS				
IC301	VHiCXA2032Q-1		CXA2032Q	AN
IC302	VHiS24C01A/-1		S24C01A	AF
IC1701	VHiLB1950V/-1		LB1950V	AQ
IC1702	VHiLB1951V/-1		LB1951V	AN
IC1703	VHiLB1638M/-1		LB1638M	AK
TRANSISTORS				
Q302	VS2SC5384C/-1		2SC5384C	AB
Q307	VS2SC5384C/-1		2SC5384C	AB
Q315	VSUMG2////-1		UMG2	AC
Q341	VS2SA1037KQ-1		2SA1037KQ	AA
Q342	VS2SA1037KQ-1		2SA1037KQ	AA
Q343	VSUPDC144EE-1		UPDC144EE	AB
COILS				
L303	VPCCM101K2R1N		Peaking 100μH	AC
L304	VPCCM220KR45N		Peaking 22μH	AC
L305	VPCCM101K2R1N		Peaking 100μH	AC
L341	VPD9M100J1R7N		Peaking 10μH	AC

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
L342	VPD9M101J100N		Peaking 100μH	AC	R321	VRS-CY1JF152J	1.5k	1/16W Metal Oxide	AA
L1701	VPCCM2R2MR09N		Peaking 2.2μH	AC	R323	VRS-CY1JF473J	47k	1/16W Metal Oxide	AA
L1702	VPCCM2R2MR09N		Peaking 2.2μH	AC	R329	VRS-CY1JF471J	470	1/16W Metal Oxide	AA
CAPACITORS					R331	VRS-CY1JF102J	1k	1/16W Metal Oxide	AA
C301	VCKYCY1CF104Z	0.1	16V Ceramic	AA	R335	VRS-CY1JF273J	27k	1/16W Metal Oxide	AA
C302	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R337	VRS-CY1JF181J	180	1/16W Metal Oxide	AA
C303	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R338	VRS-CY1JF181J	180	1/16W Metal Oxide	AA
C304	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R339	VRS-CY1JF100F	10	1/16W Metal Oxide	AA
C305	VCSATA1AJ106M	10	10V Tantalum	AC	R340	VRS-CY1JF680J	68	1/16W Metal Oxide	AA
C306	VCSATA1AJ106M	10	10V Tantalum	AC	R342	VRS-CY1JF271J	270	1/16W Metal Oxide	AA
C309	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R343	VRS-CY1JF221J	220	1/16W Metal Oxide	AA
C310	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R344	VRS-CY1JF223J	22k	1/16W Metal Oxide	AA
C311	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R345	VRS-CY1JF333J	33k	1/16W Metal Oxide	AA
C313	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R359	VRS-CY1JF474J	470	1/16W Metal Oxide	AA
C314	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R360	VRS-CY1JF103J	10k	1/16W Metal Oxide	AA
C315	VCKYCY1HB472K	4700	50V Ceramic	AA	R361	VRS-CY1JF103J	10k	1/16W Metal Oxide	AA
C318	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R363	VRS-CY1JF102J	1k	1/16W Metal Oxide	AA
C319	VCKYCY1EB103K	0.01	25V Ceramic	AA	R390	VRS-CY1JF000J	0	1/16W Metal Oxide	AA
C320	VCKYCY1EB223K	0.022	25V Ceramic	AA	R1701	VRN-CY1JF822D	8.2k	1/16W Metal Oxide	AB
C321	VCSATA1AJ106M	10	10V Tantalum	AC	R1702	VRN-CY1JF822D	8.2k	1/16W Metal Oxide	AB
C322	VCKYCY1EB223K	0.022	25V Ceramic	AA	R1703	VRS-CY1JF1R0J		1/16W Metal Oxide	AA
C324	VCKYCY1CF104Z	0.1	16V Ceramic	AA	R1704	VRN-CY1JF822D	8.2k	1/16W Metal Oxide	AB
C325	VCSATA1AJ106M	10	10V Tantalum	AC	R1707	VRS-CY1JF105J	1M	1/16W Metal Oxide	AA
C323	VCKYCY1EB103K	0.01	25V Ceramic	AA	R1708	VRS-CY1JF223J	22k	1/16W Metal Oxide	AA
C326	VCKYCY1HF103Z	0.01	50V Ceramic	AA	R1711	VRN-CY1JF103D	10k	1/16W Metal Oxide	AA
C340	VCCCCY1HH101J	100p	50V Ceramic	AA	R1712	VRS-CY1JF1R0J		1/16W Metal Oxide	AA
C341	VCCCCY1HH151J	150p	50V Ceramic	AA	MISCELLANEOUS PARTS				
C342	VCCCCY1HH101J	100p	50V Ceramic	AA	SC301	QSOCN0985TAZZ	Connector, 9pin		AE
C344	VCKYCY1CF104Z	0.1	16V Ceramic	AA	SC302	QSOCN1886TAZZ	Connector, 18pin		AD
C345	VCKYCY1HF103Z	0.01	50V Ceramic	AA	SC303	QSOCN1560TAZZ	Connector, 15pin		AE
C346	VCKYCY1HB102K	1000p	50V Ceramic	AA	SC304	QSOCN0686TAZZ	Connector, 6pin		AC
C347	VCSATA1AJ106M	10	10V Tantalum	AC	SC305	QCNCW7068TAZZ	Connector, 70pin		AG
C349	VCCCCY1HH680J	68	50V Ceramic	AA	SC306	QSOCN1085TAZZ	Connector, 10pin		AE
C1701	VCKYCY1CF104Z	0.1	16V Ceramic	AA	— End of PWB Assemblies' Parts —				
C1702	VCKYCY1CF104Z	0.1	16V Ceramic	AA	MECHANISM PARTS				
C1703	VCKYCY1CF104Z	0.1	16V Ceramic	AA	300	LCHSM0163GEZZ	Main Chassis Ass'y		AW
C1704	VCKYCY1HB103K	0.01	50V Ceramic	AA	301	NGERH1280GEZZ	Main Cam		AD
C1705	VCKYCY1HB103K	0.01	50V Ceramic	AA	302	NGERH1281GEZZ	Sub-Cam		AD
C1706	VCKYCY1HB103K	0.01	50V Ceramic	AA	303	MLEVF0470GEFW	Eject Lever		AD
C1707	VCSATA1AJ106M	10	10V Tantalum	AC	304	MLEVF0492GEFW	M Function Lever		AF
C1708	VCKYCY1CF104Z	0.1	16V Ceramic	AA	305	LHLDZ1966GEZZ	L Block Holder		AD
C1709	VCKYCY1CF104Z	0.1	16V Ceramic	AA	306	NGERW1064GEZZ	Worm Pulley		AC
C1710	VCKYCY1HB682K	6800	50V Ceramic	AA	307	NGERW1065GEZZ	Worm		AD
C1711	VCKYCY1CB104K	0.1	16V Ceramic	AB	308	NGERH1282GEZZ	Worm Wheel		AC
C1712	VCKYCY1HB682K	6800	50V Ceramic	AA	309	NGERH1283GEZZ	Lo Relay Gear		AC
C1713	VCKYCY1CB104K	0.1	16V Ceramic	AB	310	MARMM0126GEZZ	S Lo Arm Ass'y		AF
C1714	VCKYTV1CF105Z	1	16V Ceramic	AB	311	MARMM0128GEZZ	T Lo Arm Ass'y		AG
C1715	VCKYCY1CB473K	0.1	16V Ceramic	AA	312	LANGA0069GEFW	S Lo Arm Retainer		AD
C1716	VCKYCY1CB473K	0.1	16V Ceramic	AA	313	PGIDM0146GEZZ	Sup Rail		AD
C1717	VCKYCY1HB472K	4700	50V Ceramic	AA	314	PGIDM0171GEZZ	Tu Rail		AD
C1718	VCKYCY1CF104Z	0.1	16V Ceramic	AA	315	NGERH1284GEZZ	Sup Lo Gear		AC
C1719	VCKYCY1CF104Z	0.1	16V Ceramic	AA	316	NGERH1285GEZZ	Tu Lo Gear		AC
C1720	VCSATA1AJ106M	10	10V Tantalum	AC	317	MSPRD0167GEZZ	S Lo Arm Double-Acting Spring		AE
C1721	VCKYCY1CF154Z	0.15	16V Ceramic	AB	318	MSPRT0407GEZZ	T Lo Arm Double-Acting Spring		AC
C1722	VCKYTV1CF105Z	1	16V Ceramic	AB	319	MLEVP0310GEZZ	HC Lever Ass'y		AF
C1723	VCKYCY1CF154Z	0.15	16V Ceramic	AB	321	MSLiF0074GEFW	Ten Arm Operation Lever		AD
C1724	VCKYCY1CF154Z	0.15	16V Ceramic	AB	322	PGIDM0148GEZZ	Ten Arm Guide		AC
C1725	VCCCCY1HH101J	100p	50V Ceramic	AA	323	NGERH3045GEFW	Segment Gear		AD
C1726	VCCCCY1HH101J	100p	50V Ceramic	AA	324	MLEVF0472GEZZ	Tu Guide Ass'y		AC
C1727	VCKYCY1HF103Z	0.01	50V Ceramic	AA	325	PGIDP0027GEZZ	Tu Guide		AE
C1728	VCKYCY1CB104K	0.1	16V Ceramic	AB	326	MSPRC0183GEZZ	Tu Guide Spring		AA
C1730	VCKYTV1CF105Z	1	16V Ceramic	AB	327	MSPRC0184GEZZ	Si Roller Spring		AA
RESISTORS					328	MSPRC0208GEZZ	Tu Guide Lever Spring		AC
R301	VRS-CY1JF473J	47k	1/16W Metal Oxide	AA	329	LCHSS0049GEZZ	Slide Chassis Ass'y		AP
R302	VRS-CY1JF273J	27k	1/16W Metal Oxide	AA	330	MLEVF0495GEZZ	Ten Arm Ass'y		AC
R303	VRS-CY1JF152J	1.5k	1/16W Metal Oxide	AA	331	LBNDK3023GEZZ	Ten Band Ass'y		AF
R305	VRS-CY1JF000J	0	1/16W Metal Oxide	AA	332	NIDR-0016GEZZ	Swing Gear Ass'y		AF
R306	VRS-CY1JF563J	56k	1/16W Metal Oxide	AA	333	NGERH1286GEZZ	Driving Gear		AC
R307	VRS-CY1JF103J	10k	1/16W Metal Oxide	AA					
R308	VRS-CY1JF392J	3.9k	1/16W Metal Oxide	AA					
R313	VRS-CY1JF183J	18k	1/16W Metal Oxide	AA					
R316	VRS-CY1JF103J	10k	1/16W Metal Oxide	AA					
R317	VRS-CY1JF103J	10k	1/16W Metal Oxide	AA					

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
334	NGERH1287GEZZ		Pulley Gear	AD	2-7	QEARP0254TAFW		LCD Earth(VL-H870U/H875U)	AF
335	NPLYV0157GEZZ		Relay Pulley	AD	2-7	QEARP0255TAFW		LCD Earth(VL-H890U)	AF
336	MLEVP0284GEZZ		S Brake	AC	2-8	TLABH0394TAZZ		Caution Label	AB
337	NGERH1288GEZZ		Tu Brake Gear	AC	3	CCABC6097TAK1		Camera Front Cabinet	AS
338	MLEVP0285GEZZ		Tu Main Brake	AC				Ass'y (VL-H870U)	
339	MLEVP0286GEZZ		Tu Sub-Brake	AC	3	CCABC6101TAK1		Camera Front Cabinet	AS
340	MSPRD0169GEZZ		Tu Brake Spring	AD				Ass'y (VL-H875U)	
341	LHLDZ2053GEZZ		Light Guide Holder Ass'y	AF	3	CCABC6101TAK2		Camera Front Cabinet	AS
342	LANGG9102GEFW		Down Guide	AF				Ass'y (VL-H890U)	
343	MSPRT0408GEZZ		Tension Spring	AD	3-2	GCOVA1609TASA		Lens Hood	AF
344	MSPRD0186GEZZ		S Brake Spring	AD	3-3	GCOVA1610TASA		Front Cover	AE
345	CDRMU0032GE01		Upper Drum Ass'y	BF				(VL-H870U/H875U)	
346	PGIDM0154GEZZ		Tape Guide	AB	3-3	GCOVA1610TASB		Front Cover(VL-H890U)	AE
348	QBRSK0039GEZZ		Earth Spring	AD	3-4	GCOVA1611TASA		Hood Cover	AD
349	PGIDM0143GEZZ		Drum Base	AG	3-5	GCOVA1612TASA		Front Cabinet Grip Cover	AD
350	DDRML0020HE01		Lower Drum Ass'y	AY	4	DCABD6097TAK1		Camera Rear Service	AT
351	RMOTP1137GEZZ		Drum Motor	AS	4-2	JBTN-0268TASA		Power Lock Button	AF
352	PSPAQ0010GEZZ		Gap Adjusting Shim	AC	4-3	JBTN-0306TASA		Camera Button	AG
353	NRTR-0096GEZZ		R Tr Rotor Ass'y	AP	4-4	JKNBP0140TASD		Power Knob	AC
354	MSPRC0209GEZZ		Gr Adjusting Spring	AC	4-5	LHLDZ1411TAZZ		Lock Battery Holder	AC
355	LPOLM0058GEZZ		S Pole Base	AK	4-6	LHLDZ1480TA00		Power Knob Holder	AD
356	LPOLM0059GEZZ		T Pole Base	AK	4-7	MSPRC0083TAFJ		Power Lock Spring	AA
357	NDAiV1071GEZZ		Sup Reel Support	AG	4-8	PCOV9064TAZZ		Speaker Mesh	AD
358	NDAiV1072GEZZ		Tu Reel Support	AG	5	DCOVA1613TAK1		Camera Side Service	AS
359	MLEVF0517GEZZ		Pinch Lever Ass'y	AS	5-2	GFTAB1072TAKA		Battery Lid	AD
360	NBLTT0012GEZZ		Timing Belt S	AE	5-3	HDECP0052TASA		Battery Indicator	AC
361	NBLTT0013GEZZ		Timing Belt L	AE	5-4	JKNBP0178TASA		Battery Lid Knob	AC
362	NROLP0108GEZZ		Guide Roller Ass'y	AG	5-5	JKNBP0179TASA		Battery Lock Knob	AC
363	NROLP0109GEZZ		Si Roller Ass'y	AH	5-6	LANGK0469TA00		Battery Lid Angle	AE
364	QPWBH5428GEZZ		Mode FPC	AK	5-7	LHLDZ1504TAZZ		Hand Strap Holder	AC
365	CPWBN5639GE01		Sensor Ass'y	AV	5-8	MSPRC0094TAFJ		Battery Lock Spring	AE
366	QSW-M0042GEZZ		Recognition SW	AH	5-9	MSPRD0050TAFJ		Battery Lid Spring	AC
367	RDTCH0037GEZZ		Dew Sensor	AF	5-10	NSFTZ0049TAFW		Shaft	AC
368	RMOTV1019GEZZ		Cap. Motor	AZ	5-11	PSPAZ0287TAZZ		Side Spacer	AB
369	RMOTM1075GEZZ		Load. Motor	AL	5-12	TLABH0395TAZZ		Recycle Label	AB
370	QSW-R0038GEZZ		Mode SW	AG	5-13	UBNDT0123TAZZ		Hand Strap	AH
372	RAMP-0017TAN1		H/A PWB	—	6	GCOVA1608TAKA		Microphone Cover	AF
374	TLABH0584GEZZ		Caution Label		7	GCOVA1615TAKA		VCR Grip Cover	AG
375	PSHEM0014GEZZ		Counter Balance	AC	8	GFTAC1281TAKA		VCR Lid (VL-H870U)	AR
376	PSHEP0013GEZZ		Interruption Sheet	AC	8	GFTAC1284TAKA		VCR Lid (VL-H875U)	AR
200	XAPSF17P03200		Screw M1.7x3.2	AA	8	GFTAC1282TAKA		VCR Lid (VL-H890U)	AR
201	LX-XZ3036GEFP		Screw M2.0x6.0	AD	9	HBDGS0059TASB		LCD Badge	AE
202	LX-BZ3175GEFN		Screw M1.7x4.0	AC	10	JKNBP0176TASA		Open Knob	AC
203	LX-BZ3163GEFN		Screw M1.7x2.5	AC	11	LANGH0074TAFW		Reinforcement Angle	AG
204	LX-HZ3074GEFN		Screw M1.7x5.3 S Tight	AA	12	LANGK0466TAFW		Eject Angle	AC
205	LX-BZ3177GEFF		Screw M1.4x1.5	AB	13	LHLDZ1500TA00		Lid Lock	AC
206	LX-BZ3132GEFF		Screw M1.4x1.5xD3.5	AA	14	MSPRD0064TAFJ		VCR Lid Spring	AC
207	LX-BZ3178GEZZ		Screw M1.4x1.5xD4.0	AD	15	MSPRT0034TAFJ		Lock Spring	AC
208	LX-HZ3083GEFF		Screw M1.4x2.5 S Tight	AB	16	NSFTZ0084TAFW		VCR Lid Shaft	AD
209	LX-HZ3077GEFN		Screw M1.4x3.0 S Tight	AA	18	PSHEP0115TAZZ		Microphone Lead Sheet	AB
211	LX-HZ3084GEFF		Screw M1.4x4.0 S Tight	AC	19	PSHEP0116TAZZ		Microphone Lead Sheet	AC
212	LX-HZ3116GEFD		Screw M1.4x3.2 S Tight	AB	20	PSPAZ0269TAZZ		Microphone Protect Spacer	AA
213	LX-NZ3053GEZZ		Screw M1.4 Nut	AC	21	RMiCC0086TAZZ		Microphone	AS
214	LX-WZ1076GE02		Washer D0.8xD3.0x0.2t	AA	22	LANGK0470TAFW		Side Angle	AH
			Plastics		23	PSPAZ0208TA00		Mechanism Spacer	AC
215	LX-WZ1075GE02		Washer D2.1xD5.0x0.25t	AA	24	LANGK0467TAZZ		Tripod Angle	AH
			Plastics		25	TLABM1951TAZZ		Model Label (VL-H870U)	AC
216	XWHJZ12-02040		Washer D1.2xD4.0x0.25t	AC	25	TLABM1952TAZZ		Model Label (VL-H870UW)	
			Plastics		25	TLABM1953TAZZ		Model Label (VL-H870UC)	
217	QCNW-1714TAZZ		Ground Lead Wire	AC	25	TLABM1954TAZZ		Model Label (VL-H870UA)	
					25	TLABM1975TAZZ		Model Label (VL-H875U)	AC
					25	TLABM1955TAZZ		Model Label (VL-H890U)	AC
					25	TLABM1956TAZZ		Model Label (VL-H890UW)	
					25	TLABM1957TAZZ		Model Label (VL-H890UC)	
					25	TLABM1958TAZZ		Model Label (VL-H890UA)	
1	DCABA6204TAK1		V Cabinet Service	AK	26	LHLDB1030TAZZ		Lithium Holder	AC
1-2	PSPAG0095TAZZ		Cushion	AA	27	PSHEP0124TAZZ		Reflection Sheet	AB
2	DCABB6204TAK1		L Cabinet Service	AT	28	PSPAZ0286TAZZ		Turn SW Tape	AB
			(VL-H870U/H875U)		29	CCOVA1605TAK1		Tilt Fram C	AY
2	DCABB6205TAK1		L Cabinet Service	AT	30	GCOVA1614TAKA		Tilt Fram V	AE
			(VL-H890U)		31	LANGH0075TAFW		Stopper Angle	AC
2-2	GCOVA1606TAZZ		Reseptor Cover	AC	32	LANGH0076TAFW		Tilt Angle	AF
2-3	GCOVA1607TAZZ		LED Cover	AC	33	LHLDW1039TA00		FPC Holder	AD
2-4	GCOVH1243TASA		Jack Cover	AE	34	MLEVP0042TAZZ		Eject Lever	AC
2-5	GPAD-0031TASA		Grip Pad	AD	35	PSPAZ0189TAZZ		Rotation Spacer	AD
2-6	HiNDP0209TASA		Jack Indicator	AD					

CABINET PARTS LIST

Ref. No.	Part No.	★	Description	Code
36	PSPA20277TA00		Tilt Spacer	AE
37	QPWBH2896TAZZ		Tilt FPC	AN
38	QSW-Z0324TAZZ		Eject/Turn Unit	AG
39	RUNTK0344TAZZ		Lithium Unit	AH
40	PCOVU9034TA00		AV Unit Cover	AD
41	LHLDZ1519TAZZ		Holder for S.Unit	AG
42	QJAKZ0069TAZZ		DC Jack	AK
43	QJAKZ0070TAZZ		Rimocon/Jack Unit	AX
44	QSW-Z0322TAZZ		VCR Operation Unit	AR
45	JKNBP0177TASA		Zoom Knob	AG
46	LHLDZ1518TAZZ		Speaker Holder	AG
47	PSPA20285TAZZ		Zoom FPC Spacer	AB
48	QSW-Z0325TAZZ		Zoom Power Unit	AQ
49	VSP0028P-50WN		Speaker	AL
50	GCOVA1616TAKA		Camera Rear Cover	AG
51	QTANZ0141TAZZ		B Terminal Unit	AN
52	CLNSA0136TA01		Lens	BR
53	LHLDZ1499TA00		Lens Holder	AD
54	LANGK0468TAFW		Touch Angle	AE
			(VL-H870U/H875U)	
54	LANGK0471TAFW		Touch Angle (VL-H890U)	AD
55	LHLDZ1501TAZZ		LCD Holder	AG
			(VL-H870U/H875U)	
55	LHLDZ1502TAZZ		LCD Holder (VL-H890U)	AG
56	PZETV0343TAZZ		LCD Fixing (VL-H870U/H875U)	AA
56	PZETV0370TAZZ		LCD Fixing (VL-H890U)	AB
57	PSPA20289TAZZ		Touch Panel Sheet	AE
			(VL-H870U/H875U)	
57	PSPA20290TAZZ		Touch Panel Sheet	AF
			(VL-H890U)	
58	QSW-Z0288TAZZ		Touch Panel	BN
			(VL-H870U/H875U)	
58	QSW-Z0303TAZZ		Touch Panel (VL-H890U)	BM
△ 59	CLMPV0043TA01		Lamp Inverter Ass'y	AZ
			(VL-H870U/H875U)	
△ 59	CLMPV0044TA01		Lamp Inverter Ass'y	
			(VL-H890U)	
60	CPNLC0047RM01		LCD Panel Ass'y	BZ
			(VL-H870U/H875U)	
60	CPNLC0048RM01		LCD Panel Ass'y (VL-H890U)	CD
61	PGiDM0037TAZZ		Light Guide Plate	AG
			(VL-H870U/H875U)	
61	PGiDM0030TAZZ		Light Guide Plate (VL-H890U)	AH
62	PMiR-0021TAZZ		Refraction Polarizing Sheet	AC
			(VL-H870U/H875U)	
62	PMiR-0032TAZZ		Refraction Polarizing Sheet	AD
			(VL-H890U)	
63	PSHEP0045TAZZ		Diffusion Sheet	AD
			(VL-H870U/H875U)	
63	PSHEP0090TAZZ		Diffusion Sheet (VL-H890U)	AD
64	PSHEP0070TAZZ		DBEF (VL-H870U/H875U)	AN
64	PSHEP0092TAZZ		DBEF (VL-H890U)	AN
65	PSHEP0084TAZZ		Prism Sheet	AG
			(VL-H870U/H875U)	
65	PSHEP0093TAZZ		Prism Sheet (VL-H890U)	AH
66	GFTAC1241TASA		Cassette Control Cover	AD
67	DUNTK2886QA00		VCR Unit (VL-H870U/	—
			H870UA/H870UC/H870UW)	
67	DUNTK2886QA01		VCR Unit(VL-H875U)	—
67	DUNTK2886QA07		VCR Unit(VL-H890U)	—
69	DUNTK2892QA00		Camera 2 Unit	—
70	DUNTK2889QA00		Camera 1 Unit	—
71	PSLDM3336TAFW		Camera A Shield	AD
72	PSLDM3337TAFW		Camera B Shield	AD
73	PSHEP0126TAZZ		DC Jack Sheet	AB
74	PSHEP0127TAZZ		AV Terminal Sheet	AB
75	PSHEP0128TAZZ		Audio Terminal Sheet	AB
a	LX-HZ0018TAFN		M2x6 Tapping Screw, Silver	AA
b	LX-HZ0018TAFF		M2x6 Tapping Screw, Black	AA
c	LX-HZ0045TAFN		M2x4 Tapping Screw, Silver	AA
d	XiPSF20P04000		M2x4 Small Screw, Black	AA
			Zinc Plating	
e	LX-BZ0191TAFD		M2 Special Screw	AC
f	XiPSD20P03000		M2x3 Screw	AA
g	LX-HZ0045TAFF		M2x4 Tapping Screw, Black	AA

Ref. No.	Part No.	★	Description	Code
h	LX-HZ0013TAFF		M1.7x6 Tapping Screw, Black	AA
i	XiPSN20P04000		M2x4 Small Screw, Silver	AA
j	LX-HZ0050TAFN		M1.7x4 Tapping Screw, Silver	AA
k	LX-BZ0236TAFD		M2x8 Screw	AB
l	XiPSF20P03000		M2x3 Screw, Black	AA

CASSETTE HOUSING PARTS

400	CHLDX3077GE01		Cassette Compartment Ass'y	AY
401	MSPRT0414GEZZ		Up Main Spring	AD
402	MROD-0014GEFJ		Damper rod	AG
403	PDMP-0013GEZZ		Cassette Compartment Damper	AG

CAMERA UNIT PARTS

1	PCOVM8019TA00		Dust Protection Rubber	AC
2	LANGK0314TAFW		Sensor Holder	AC
3	PFIW0062TAZZ		Crystal	AU
4	VHiLZ2453A6-1		CCD Sensor	BK
5	DUNTK2895PM00		CCD Unit	—
6	LX-HZ0013TAFF		Screw (1.7 X 6)	AA

SUPPLIED ACCESSORIES

ACCESSORIES

△	GCOVH1244TASA		Lens Cap	AG
△	QACCB0016TAZZ		AC Cord(VL-H870UW)	AV
	QACCK0002TAZZ		AC Cord(VL-H870UA)	AM
	QCNW-1906TAZZ		A/V Cable	AN
	QPLGA0010GEZZ		AC Plug(VL-H870UA)	AF
	RRMCG0074TASA		Remote Control	AP
	TiNSE0319TAZZ		Operation Manual	AH
			(VL-H870U/H870UA/H870UW)	
	TiNSE0320TAZZ		Operation Manual (VL-H875U)	AH
	TiNSE0321TAZZ		Operation Manual	AK
			(VL-H890U/H890UA/H890UW)	
	TiNSL0170TAZZ		Operation Manual(VL-H870UC)	
	TiNSL0171TAZZ		Operation Manual(VL-H890UC)	
	UADP-0303TAZZ		AC Adapter (VL-H870U/	BC
			H870UC/H875U/H890U/H890UC)	
	UADP-0304TAZZ		AC Adapter (VL-H870U/	BC
			H870UW/H890UA/H890UW)	
	UBATi0058TAZZ		Battery Pack	BF
			(VL-H870U/H875U/H890U)	
	UBATi0059TAZZ		Battery Pack	
			(VL-H870UA/H870UC/H870UW/	
			H890UA/H890UC/H890UW)	
	UBATU0243GEZZ		Battery	
	UBATL0011TAZZ		Lithium Battery	AE
	UBNDS0010TASA		Shoulder Strap	AH
	TLABZ0495TAZZ		R-C Label(VL-H870UA/	
			H870UW/H890UA/H890UW)	

ACCESSORIES(NOT REPLACEMENT ITEM)

TGANE0044TAZZ	Guarantee Card	AC
	(VL-H870U/H875U/H890U)	
TGANZ0021TAZZ	Guarantee Card	AD
	(VL-H870UC/H890UC)	
TLABK0001TAZZ	No.Card	AA

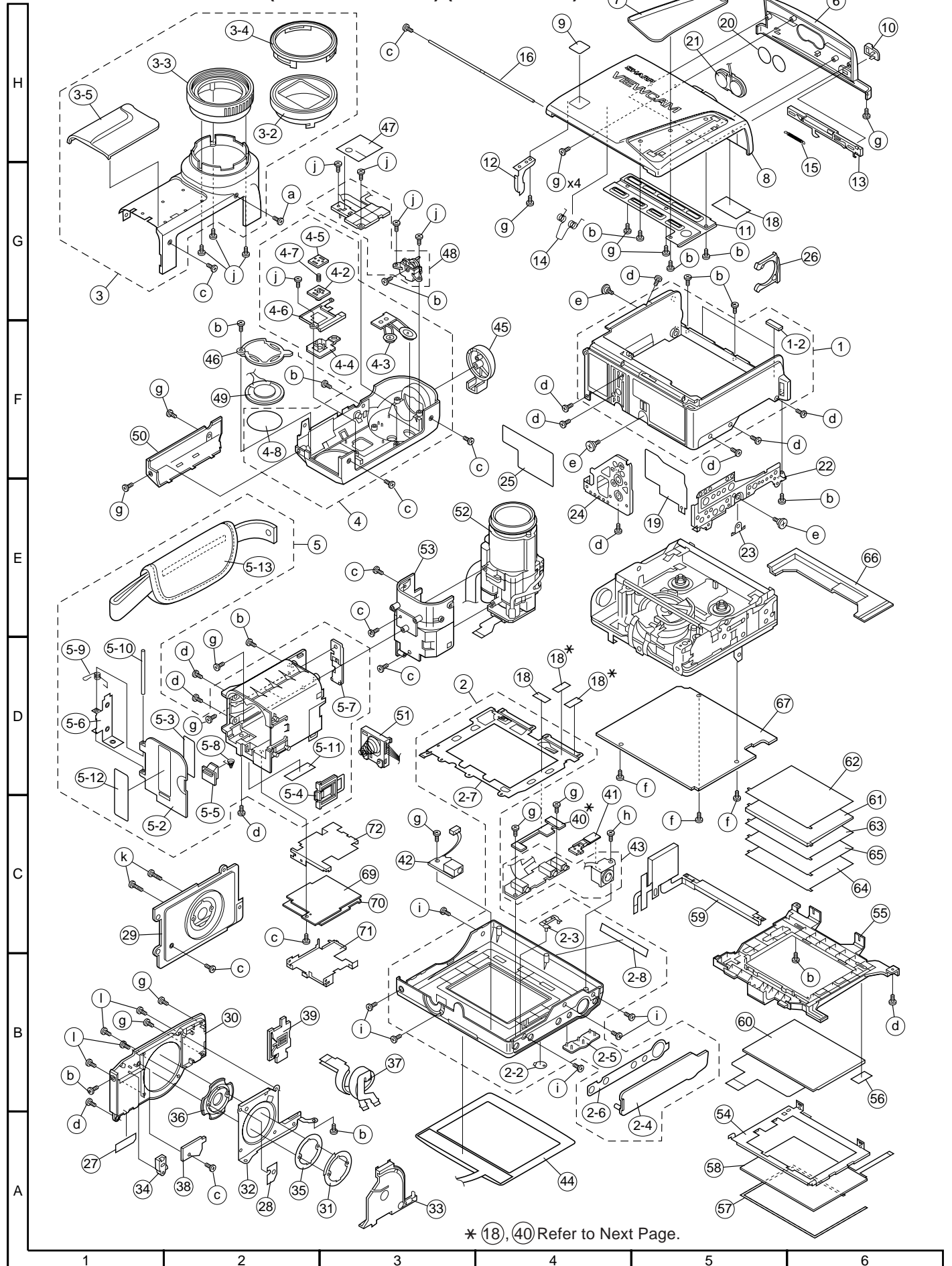
PACKING PARTS

(NOT REPLACEMENT ITEM)

SPAKA6312TAZZ	Top Case	—
SPAKA6314TAZZ	Packing Case	—
SPAKA6313TAZZ	Bottom Case	—
SPAKC7419TAZZ	Packing Case(VL-H870U)	—

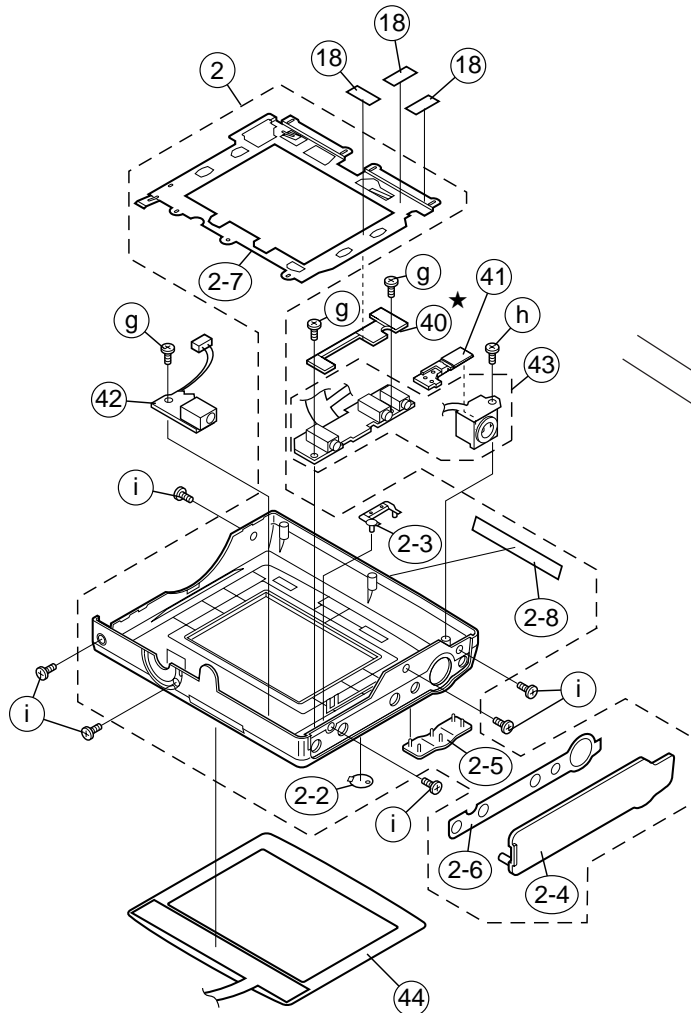
This diagram is an exploded view of a complex mechanical assembly, likely a motor or pump. It shows the relationship between various components, which are identified by numbered callouts. The components are arranged in a hierarchical manner, showing how they fit together. The assembly includes a base plate (300), a central shaft (310), and various gears (312, 317, 321, 323, 327, 332, 333, 335, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374). Other components include bearings (316, 318, 320, 322, 324, 326, 328, 330, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 360, 362, 364, 366, 368, 370, 372, 374), seals (311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 339, 341, 343, 345, 347, 349, 351, 353, 355, 357, 359, 361, 363, 365, 367, 369, 371, 373), and fasteners (screws, bolts, nuts, washers, etc.). The diagram is organized into a grid with letters A through G on the vertical axis and numbers 1 through 6 on the horizontal axis.

CABINET EXPLODED VIEW (VL-H870U/H875U) (First Lot Use)

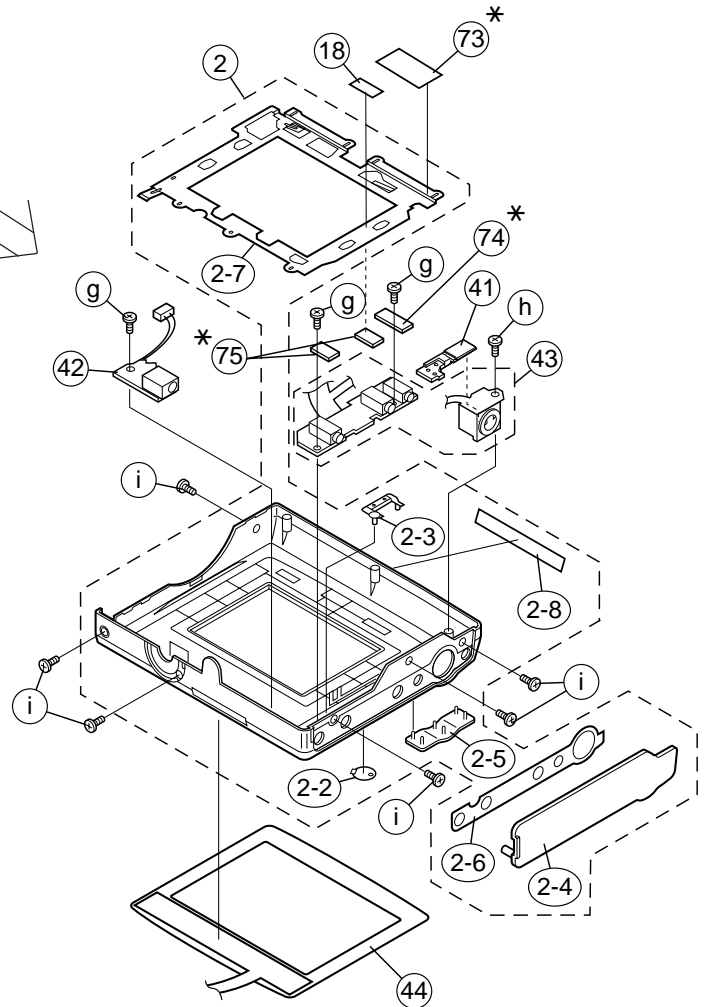


CABINET EXPLODED VIEW (VL-H870U/H875U) Change Section of Second Lot

(First Lot)



(Second Lot)



★Dis Use Part

④⑩ AV Unit Cover

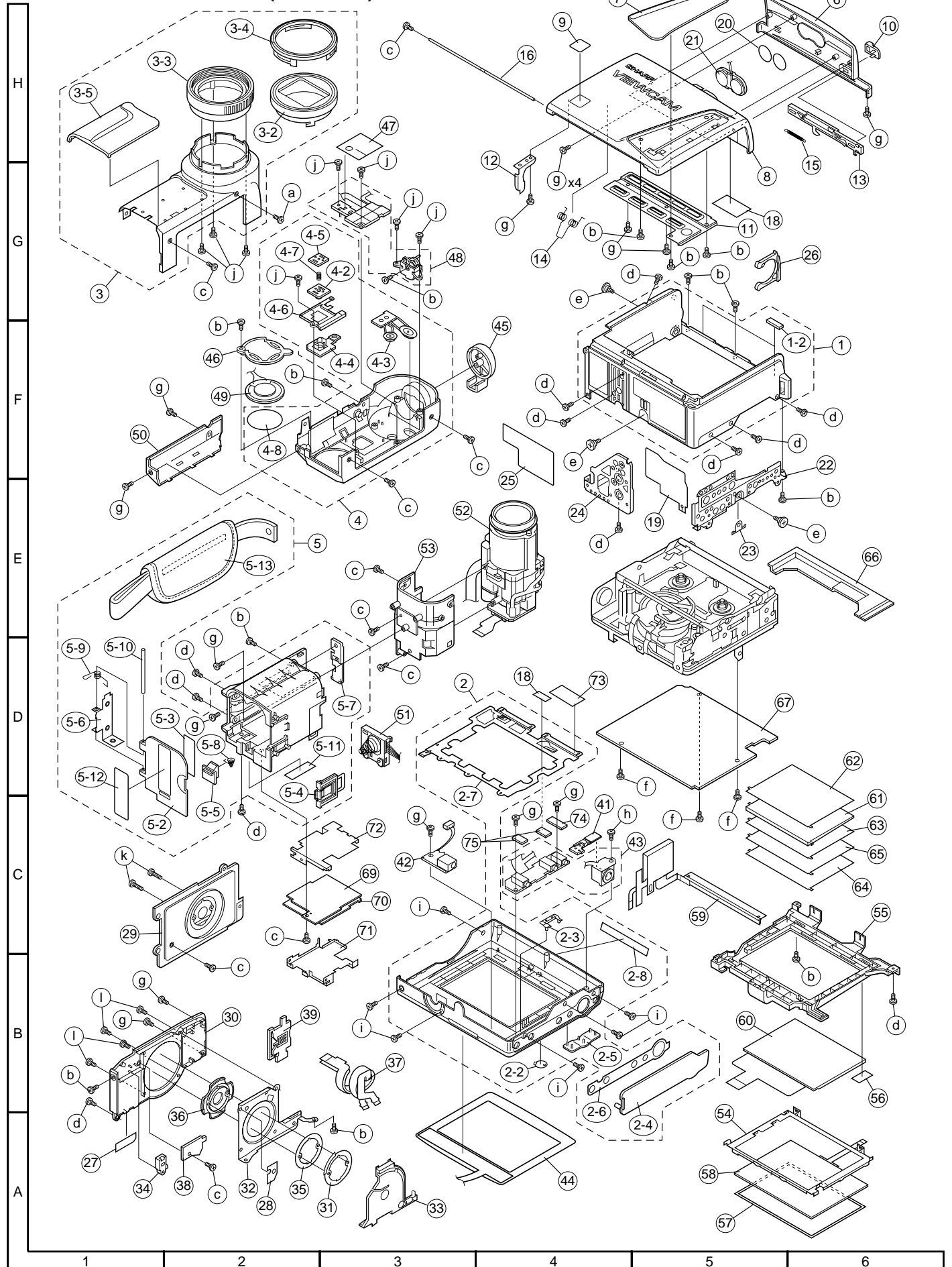
*Use Parts

⑦③ DC Jack Sheet

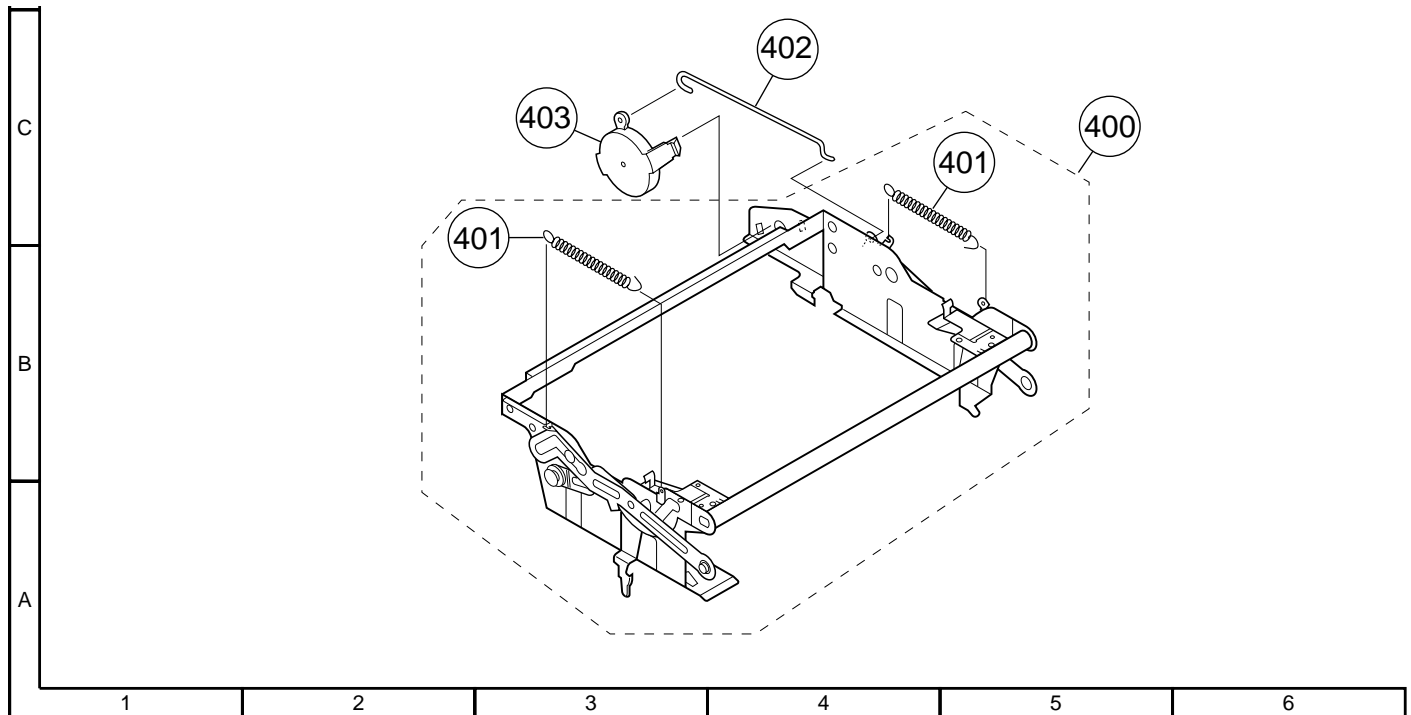
⑦④ AV Terminal Sheet

⑦⑤ Audio Terminal Sheet

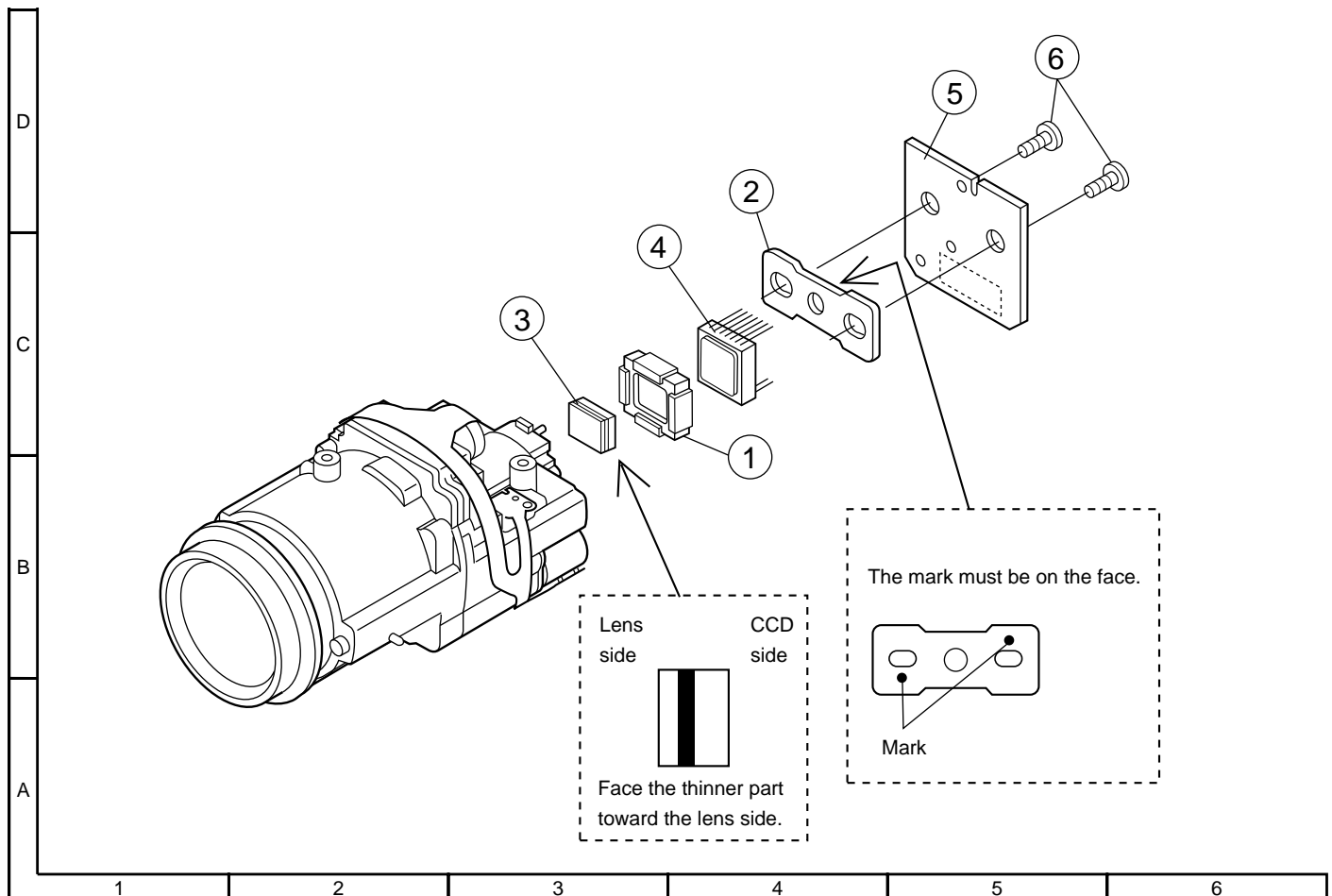
CABINET EXPLODED VIEW (VL-H890U)



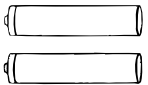
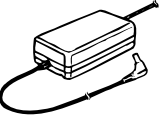






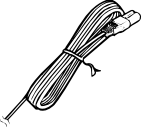

CASSETTE HOUSING CONTROL UNIT

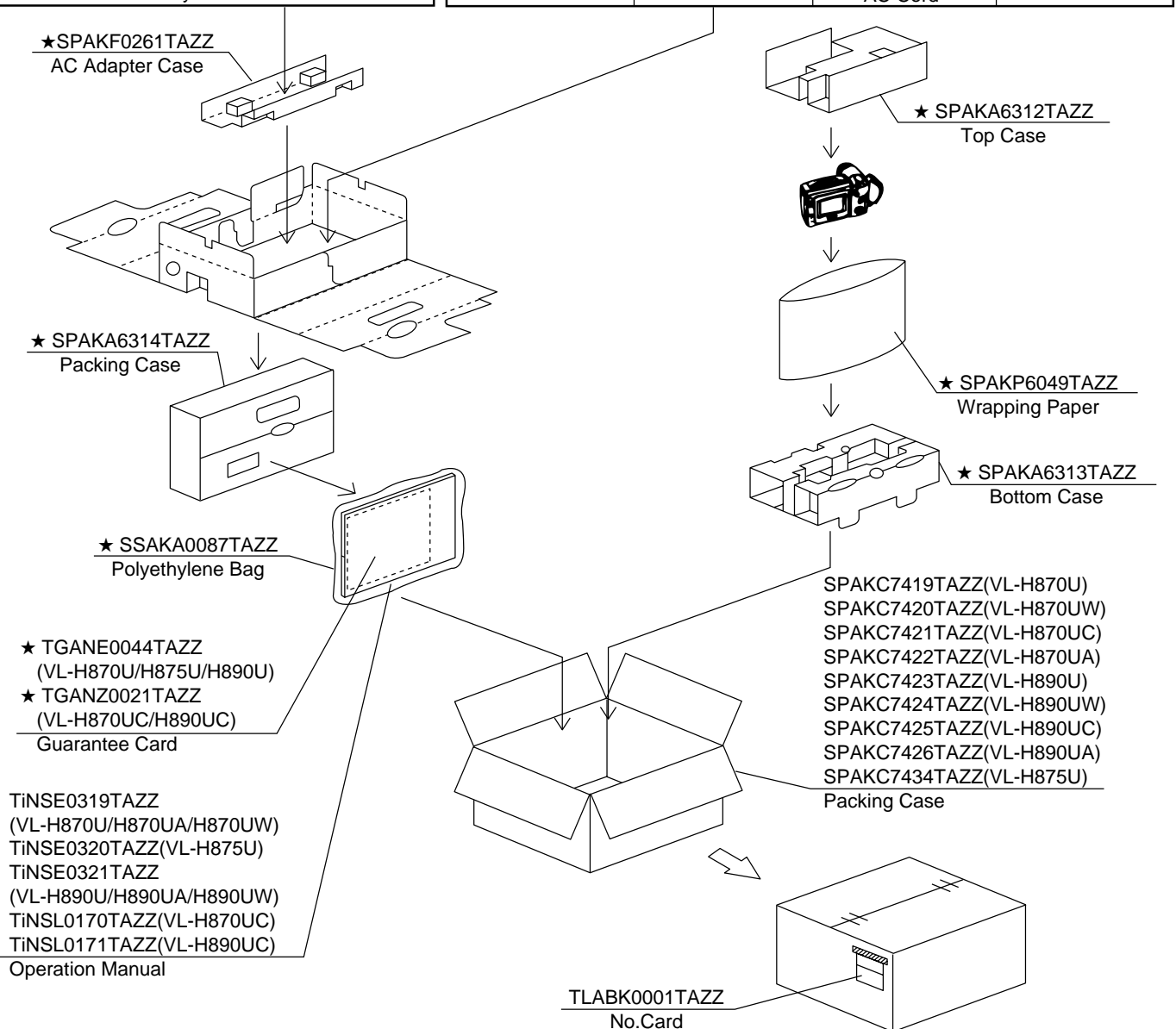


CAMERA UNIT EXPLODED VIEW



12. PACKING OF THE SET

 UBATU0243GEZZ AA Battery x2	 UADP-0303TAZZ (VL-H870U/H870UC/H875U/ H890U/H890UC) UADP-0304TAZZ (VL-H870UA/H870UW/ H890UA/H890UW) AC Adapter	 RRMCG0074TASA Remote Control	 QCNW-1906TAZZ A/V Cable	 UBATL0011TAZZ Lithium Battery
 UBATi0058TAZZ (VL-H870U/H875U/H890U) UBATi0059TAZZ (VL-H870UA/H870UC/H870UW/ H890UA/H890UC/H890UW) Battery Pack		 UBND50010TASA Shoulder Strap	 GCOVH1244TASA Lens Cap	 QACCB0016TAZZ (VL-H870UW) QACCK0002TAZZ (VL-H870UA) AC Cord  QPLGA0010GEZZ (VL-H870UA) AC Plug



★ Not Replacement Item

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